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FIFTEENTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

AND

VITAL STATISTICS

OF THE

Commonwealth of Pennsylvania.

VOL. II.

*Transmitted to the Governor December 1, 1899.*

WM. STANLEY RAY,  
STATE PRINTER OF PENNSYLVANIA.  
1900.





## APPENDIX K.

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### CORRESPONDENCE AND LEGAL OPINIONS.

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#### Legal Opinions:

1. The right of Boards of Health to license embalmers.
2. Decision of Judge Orlady in the Commonwealth vs. Yost.
3. Power of State Board of Health to call on emergency fund.
4. Procedure of State Board of Health in calling on emergency fund.
5. Procedure of State Board of Health in calling on emergency fund.
6. Proper parties to bear expense in destitution caused by quarantine.
7. Opinion of John L. Kinsey, City Solicitor, as to burial permits.
8. Charge of Judge Wilson, in the case of Gabriel Upton vs. the City of Philadelphia.

#### Correspondence:

Plans with regard to disinfection of returning troops.  
Placarding houses in contagious diseases.  
Registration of deaths.  
Sewage disposal at the Roman Catholic Protectory at Fatland.  
Proposed drainage of sewage into Fishing Creek.  
Organization of township school boards as boards of health.  
Quarantine of typhoid fever.  
Water conveyed in lead lined pipes.  
Advantages of the Pocono Region as a health resort.

**The Right of Boards of Health to License Embalmers.**

**Attorney General's Office,**

**Springfield, June 16, 1899.**

**State Board of Health, Springfield, Illinois:**

Gentlemen: I am in receipt of the letter of your secretary, date of June 13, enclosing a copy of your official order concerning the transportation of the dead and requesting my opinion as to whether the Board has authority to charge and collect a fee of five dollars for the examination of applicants, and issuing of certificates to those found qualified as embalmers, and in reply, say I am of the opinion it has that authority.

Section 2, of chapter 126a, gives the State Board of Health general supervision of the interests of the health and life of the citizens of the State, and gives it authority "to make such rules and regulations and such sanitary investigations as they may from time to time deem necessary for the preservation or improvement of public health." There is no express authority in the statute for the examination of embalmers, or the issue of a license, or collection of a fee, but that may be implied. Parker & Worthington, in their work on "Public Health and Safety," section 256, say: "A very common method of regulating the various trades, employments and professions is by requiring licenses to be taken out for the privilege of engaging in them. Legislation of this kind is within the powers of the State, provided it be uniform in its operation and not discriminating. The same power may be delegated to municipal or other legal authorities, to be exercised subject to the same conditions, and in the absence of express grant of authority it may be implied from the words: power 'to regulate,' to 'control,' or 'to restrain' the exercises of trades, employments and professions."

Kinsley v. City of Chicago, 124 Ill., 359, fully sustain that provision. See also to the same effect the laundry license case, 22 Fed. Rep. 701.

I remain yours respectfully,

**E. C. Akin,  
Attorney General.**

**Decision of Judge Orlady Sustaining State Board of Health in Action  
for Protection of a Water Supply.**

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**Commonwealth vs. Yost.**

The Superior Court opinion in the case of the Commonwealth vs. Yost, in which the defendant, G. P. Yost, of Glen Rock, was indicted for maintaining a nuisance, said nuisance being a water closet upon one of the tributaries of the south branch of the Codorus creek. W. B. Gemmil, J. R. Strawbridge and H. C. Niles for the Commonwealth; J. S. Black for the defendant. The opinion follows:

August 1, 1899. Orlady, J.—The indictment in this case contains three counts, viz: 1, For maintaining a nuisance under section 73 of the Crimes act of March 31, 1860, P. L. 402; 2 and 3, for refusing to obey an order of the State Board of Health to abate and remove a nuisance under the act of June 3, 1885, P. L. 56. The uncontradicted evidence shows that the defendant erected and maintained a privy on the bank of a natural stream of fresh water in the borough of Glen Rock, which is situated about twelve miles above the pumping station of a water company and which supplies the city with water for drinking and domestic purposes; that the privy is so located that human dejecta and excrementitious matter are deposited in the bed of the stream, and by the natural flow of the water in the channel they are carried down the stream into Codorus creek; that pollution of drinking water by human feces is likely to produce disease in those who use the water and the living germs of dysentery, typhoid fever, and other diseases in such matters may be, and have been carried in running water from twenty to thirty miles; that there had been nineteen cases of typhoid fever in Glen Rock prior to this prosecution, and shortly afterwards a number of persons in the city of York were affected with the same fever.

It appears that fifty years prior to the trial there were three or four houses located on this mountain stream and from this nucleus has grown the borough of Glen Rock, though the date of its incorporation is not given.

The defense interposed in the first count was, that the stream on which the privy was located was a public and common sewer of the borough and was used as such in a lawful manner, in support of which it was shown, that where a public street crossed the stream it was covered by a bridge that had been constructed by the borough; that at other points property owners had erected their buildings on and

over the stream, and that on one occasion when some flood debris had accumulated in the channel the street commissioner had removed it to prevent the backing of water upon the streets. It was also shown that the borough had enacted a health ordinance, as suggested by the State Board of Health, in which it was provided; section 13. "The sewerage from each building on every street provided with a common sewer shall be conducted into said sewer," and the defendant was permitted to testify under objection that he believed he was required and compelled under that section to empty the privy deposits into the stream, and that the stream was spoken of as Manchester street sewer. The court submitted to the jury the question whether or not the stream was a public sewer of the borough of Glen Rock.

A water course does not lose any of its characteristics because houses are built on its banks, or because they increase in numbers so as to become a borough. It was not shown that this borough had any sewage system or had exercised any supervision or control over this stream, or that any money had been expended in maintaining it. There cannot be a public or common sewer that has not been constructed and maintained by a municipality and that is not subject to municipal control.

The trifling emergency work done by this borough to relieve its streets of the danger of overflow was not evidence of any municipal duty to maintain it; *Hunn vs. Mayor*, 40 Pa. 364. A municipal corporation is nothing more than an aggregation of persons and it cannot be that liability is wholly lost in numbers; men, whether as individuals or communities, have duties to perform which lie at the foundation of responsibility; *Philadelphia vs. Gilmarten*, 71 Pa. 140.

The term sewer, as generally used and understood in law, denotes a conduit constructed and maintained by a municipality or by its authority, by means of which cities and towns are drained of superfluous waters, filth and other refuse matter; *Bouvier's Law Dict.* Title, Sewer, 6 Am. and Eng. Encl. of Law, 221.

The power to construct sewers does not impose upon the corporate authorities an obligation to exercise the power, *Carr vs. Northern Liberties*, 35 Pa. 324. From all that appears in this case, the abutting property owners had riparian rights in and to the stream and none other, and as such the defendant had no right to pollute the water as it passed his property. The health ordinance could not be construed to mean that the privy was a building on a street provided with a common sewer, or that this fresh water stream was a common sewer. The ninth section of the ordinance prohibits the construction or maintenance of a privy or cess pool within one hundred and fifty feet of any source of water used for drinking or culinary purposes. This ordinance was enacted to carry out and more effectually to en-

force the regulations of the State Board of Health. The wise provisions contained in these regulations were not intended for the exclusive benefit of Glen Rock borough, and it would be a strange construction indeed which would justify this defect, or, as he claims, would compel him to do an act within the borough which in all probability would contaminate the water for those who had a right to use it below the borough. It is difficult to imagine a more injurious source of disease or a more grave offence against the public health than to place in a natural stream of fresh water in close proximity to a source of water supply human dejecta and excrement with the accompanying poisonous and disease producing germs, knowing that the natural course of the stream leads direct to a city's pumping station. It is just such disregard of law and duty that the Legislature, and State Board of Health with its local branches all over the State, have endeavored to prevent, and to just such conduct our eminent physicians and specialists have traced the direct source of a number of loathsome and fatal epidemics. To be a public nuisance it is not necessary that it should injure every one by its malign influence, but that it be such as would naturally produce injury to all who have an interest in the water for domestic purposes.

No prescription or usage can justify the pollution of a stream by the discharge of sewage in such a manner as to be injurious to the public health. Lapse of time will not legalize a public nuisance; Philadelphia's appeal, 78 Pa. 33; Commonwealth v. McDonald, 16 S. & R. 390; Philadelphia vs. Railroad Company, 58 Pa. 253; Johnson vs. Irvin, 3 S. & R. 292.

To deposit in a natural water course, in close proximity to a source of supply from which the water is used for domestic purposes, the noisome and offensive matter described in the uncontradicted evidence in this case is a public nuisance, and it should have been so declared by the court. The use of a privy, the percolations of which contaminate the water of a well of an adjoining land owner, used for household purposes, is a nuisance per se, not justifiable on the ground of necessity; Haugh's Appeal, 102 Pa. 42. It is indictable at common law to throw the carcass of an animal in a well thereby corrupting it; State vs. Buckman, 8 N. H. 203; Kelly vs. New York (Sup. Ct.) 27 N. Y. Sup. 164; Ball vs. Nye, 99 Mass. 582, S. C. 97 Am. Dec. 57; Brown vs. Illins, 71 Am. Dec. 49.

The State Board of Health was created for the better protection of life and health, and to prevent the spread of contagious and infectious diseases in the Commonwealth. It is given "power to enforce such regulations as will tend to limit the progress of epidemic diseases." In places where there is no local board of health, and in cases where boards of health or health officers exist, but the sanitary laws or regulations are inoperative, it "shall have power and au-

thority to order nuisances or the cause of any special disease or mortality to be abated and removed, and to enforce quarantine regulations, as said board shall direct."

Pursuant to the power given by the act of Assembly, the State Board, at a regular meeting on July 5, 1885, appointed Dr. Benjamin Lee as Secretary and adopted regulations through which the aim and purpose of the legislation was to be effected. In regard to nuisances it was enacted, viz: Whenever complaint is made in writing to the secretary of the Board of the existence of a nuisance, he shall forthwith, as executive officer of the Board, investigate the matter and shall determine whether the alleged nuisance is detrimental to the public health, or the cause of any special disease or mortality, and in case he shall so find, then he shall notify the owner, agent or occupier of said premises, in writing, of such finding, and the executive officer shall thereupon order and direct the abatement and removal of the same within ——— days; and in the event of the failure of said owner, agent or occupier of said property to abate and remove the nuisance, then the executive officer may proceed to abate and remove the same and may employ all the force necessary to do so, and shall proceed by warrant, arrest and indictment, to convict the party failing to obey said order of abatement and removal."

The Commonwealth offered to prove that a complaint was made to the State Board of the existence of this privy on a contributory of the Codorus creek, and that on June 28, 1898, after an examination of the premises by a properly appointed officer of the State Board, the defendant was notified and required to abate and remove it within ten days, and was specially notified as follows: "In order to effectually abate and remove the nuisance herein referred to, it is hereby ordered that you remove your privy to a distance from the stream that will prevent the drainage therefrom entering its waters." Which notice and order was signed by Benjamin Lee, M. D., as Secretary and Executive Officer. This offer was overruled and the evidence excluded by the court for the reason that the Board of Health as such, had never acted upon the complaint; that the notice was not given by the State Board of Health, but only by its Secretary, the court holding that it was not such action as would sustain an indictment, under the act of 1885, for refusing to obey a notice. The Legislature cannot delegate its power to make a law; but it can delegate a power to determine some fact or state of things upon which the law makes its own action depend. To deny this would stop the wheels of government; Lock's Appeal, 72 Pa. 491. The State Board is charged with the preservation of the public health, and is necessarily invested with large powers in the abatement of nuisances. The statutory requisites of the gentlemen who comprise this Board, and who serve the public without monied compensation, show the legislative intent



in securing the highest proficiency and interest in the preservation of the health and safety of the people of the State.

The power and authority of the State Board of Health to order nuisances or the cause of special disease or mortality to be abated and removed is not limited to the action taken at the convened meetings of that body. The Board is only an instrumentality of the Commonwealth through which the purposes of the act are to be effected. The grant of a general power carries with it, by necessary implication, a grant of all the special powers which are necessary to effectuate the grant of the general powers. The act of Assembly which created the State Board of Health designated the Secretary as its executive officer. As such officer, with his duties defined by the by-laws and regulations, he is entrusted with the execution of the law, and of superintending its enforcement, and when he is conducting the business of the Board, within the scope of his authority, he speaks for, acts for and virtually is the Board himself. The statute and the by-laws of the Board, gave him ample authority to give the notice to this defendant and to proceed by warrant, arrest and indictment to convict the party failing to obey said order of abatement and removal." Whether the defendant was justified in refusing to obey the notice served upon him by the executive officer of the State Board depends upon the fact as to whether or not the privy as located was a nuisance, not only in the judgment of the executive officer of the State Board, but in its being legally ascertained in court.

The Commonwealth cannot be expected to prove to an absolute certainty that disease producing germs are carried a given distance in a water course, as it would be an exaction impossible of performance to require a chemical and microscopic analysis of the whole body of a stream of water. Such a fact is not capable of being demonstrated to a mathematical certainty and such a degree of proof is not demanded by the law. Whether a state of facts amounts to a nuisance is in many cases dependent on the opinion of witnesses, and a reasonable and probable exactness based on experience and scientific investigation is the most that can be expected in such cases.

The reasonable doubt as to guilt, which is the defendant's property, must arise out of the evidence, which prevents a jury from coming to a satisfactory conclusion, a doubt which causes a juror's mind to pause and hesitate. But such a doubt must fairly arise out of the evidence, and not be merely fancied or conjured up. It must be an honest doubt; such a difficulty as strikes a conscientious mind and clouds the judgment. If the mind is fairly satisfied of a fact on the evidence as much so as would induce a man of reasonable fairness and judgment to take the fact as true and to act upon it in a manner of importance to himself, it would be sufficient to rest a verdict upon; Commonwealth vs. Cleary; 135 Pa. 64.

It would be impossible to have the State Board meet on the ground of an alleged nuisance to consider every complaint before deciding upon its abatement or removal. To require this would nullify and invalidate the whole system. A Board of Health of a municipality has ample authority to declare to be a nuisance whatever is per se a nuisance at common law, and to abate it. The determination of a Board of Health that a nuisance exists is not final and conclusive, and when the cause is brought to trial, if the uncontradicted evidence shows it to be a nuisance per se, it should be so declared by the court, as in the case of a pig-sty, a fat rendering or bone boiling establishment, and the like in the populous part of a city, and if not, the case should go to a jury for its ascertainment under proper instructions. The State Board in a great State like Pennsylvania can only act by its agents and appointees, who speak for it by right of their appointment. The location and character of the alleged nuisance can be best ascertained by individual inspection, rather than incur the delay and expense incident to the meeting of a number of persons comprising a Board. Under the facts in this case the State Board is the final authority in deciding whether in places where Boards of Health or health officers exist, the sanitary laws or regulations are inoperative, so as to order the abatement of and removal of a nuisance. The defendant testified that he prepared the ordinance enacted by the borough, that he was a member of the local board of health, and was the health officer of the borough at the time. His own interpretation of the regulations of the State Board and of the ordinance cannot be the measure of his culpability and the State Board should not be bound by the act of any such representative. Regard for the public welfare is the highest law, and it is not at all material that the complaint in the case was made by the York Water Company, but it should rather be considered in the light of a public benefactor instead of being found, to be a prosecutor to have the costs imposed on it. The prosecution was grave in its character and was instituted at the instance of the State Board of Health. It was well worthy of an investigation for the good of the public. The Water Company was, no doubt, instrumental in furnishing the State Board of Health the evidence necessary to bring the case to trial, but this did not constitute it the prosecutor. It was not trifling, unwarranted or malicious in its character, and it was fully justified by the facts of the case.

The assignments of error are sustained. The judgment of the court below is reversed and the verdict set aside. The record is remitted to the court below and it is ordered that the case be again tried.



Opinion of Henry C. McCormick, Attorney General, as to the Power of the State Board of Health to Expend Moneys for the Suppression of an Epidemic of Small-Pox in Bedford County.

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Office of the Attorney General,  
Harrisburg, December 14, 1898.

Daniel H. Hastings, Governor:

Sir: Replying to your inquiry of this day, as to the power of the State Board of Health to expend moneys for the suppression of an epidemic of small-pox in Bedford county, I beg leave to say, that by the act of 22d day of July, 1897 (P. L. 315), there was appropriated the sum of fifty thousand dollars out of any money in the Treasury not otherwise appropriated "for the purpose of creating an emergency fund to be used, as occasion may require, by the State Board of Health in the suppression of epidemics, prevention of diseases, and protection of human life in times of disease and disaster beyond the relief of individual and organized charity."

The same act provides that the State Board of Health shall determine that the public health is threatened "either by epidemic or as a result of great disaster, to such an extent that the local authorities and individual and organized charity are unable to meet the emergency," and that "they shall pass a resolution to that effect, stating all the facts in the case and the reasons for considering that State aid is needed, and to what amount, and transmit the same to the Governor. If the resolutions and the reasons therein set forth shall meet with the approval of the Governor, Auditor General and State Treasurer, they shall so certify and file the resolutions and certificate of approval in the office of the Auditor General, who shall then draw his warrant upon the State Treasurer for the amount approved by the Governor, Auditor General and State Treasurer, and place the same in the hands of the Treasurer of the State Board of Health to be used for the purpose set forth in the resolution approved as aforesaid, and for no other purpose."

The act further provides that if, after the epidemic shall have been suppressed, etc., there shall still be a balance of the amount drawn left in the hands of the Treasurer of the State Board of Health, he shall, without delay, return the same to the State Treasurer, and it shall become a part of the said emergency fund. And the act still further provides that the Treasurer of the State Board of Health "shall file with the Auditor General a specifically itemized statement,

made under oath, and accompanied by proper vouchers, of the expenditures of said moneys as soon as possible."

It would seem, therefore, to be clear that the law authorizes the expenditure of the moneys provided the conditions precedent, to wit; the action of the State Board of Health, be observed as required by the act of Assembly.

I am,

Your obedient servant,

HENRY C. McCORMICK,  
Attorney General.

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Advice of Wilbur F. Reeder, Deputy Attorney General, as to Methods of Procedure in Order to Obtain Moneys for the Suppression of Epidemics.

January 16, 1899.

Benjamin Lee, M. D., 1420 Chestnut Street, Philadelphia, Pa.:

My Dear Sir: Replying to yours of Januray 11, you are advised that, in an opinion recently delivered by the Attorney General, the act of July 22, 1897, was construed, and you were advised under what circumstances moneys could be drawn from the emergency fund.

You are now advised that "Whenever the State Board of Health shall determine that the public health is threatened, either by epidemic or as a result of great disaster, to such an extent that the local authorities and individual and organized charity are unable to meet the emergency, they shall pass a resolution to that effect, stating all the facts in the case and the reasons for considering that State aid is needed, and to what amount, and transmit the same to the Governor." Therefore the proceeding is precisely the same as was adopted by your Board in the Bedford small-pox matter. If your Board of Health will pass such a resolution and forward the same to the Governor, he doubtless will lay it before the State Treasurer and Auditor General, by whom favorable action will be taken in the premises. The money thus appropriated to your Board could be used in suppressing the threatened danger to public health and to aid in the enforcement of health regulations in cities and other municipalities, for the purpose of protecting the people against the ravages of dangerous diseases. It would be just as appropriate for the Board of Health to take these measures for the protection of the entire State as for the protection of a particular locality.

Yours very respectfully,

WILBUR F. REEDER,  
Deputy Attorney General.

**Opinion of Frederic W. Fleitz, Deputy Attorney General, as to the Power of the State Board of Health to Expend Moneys for the Suppression of an Epidemic of Small-pox in Bedford County.**

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Office of the Attorney General,  
Harrisburg, Pa., January 27, 1899.

Hon. William A. Stone, Governor:

Sir: I have before me yours of 25th inst., in which you ask to be advised as to the power of the State Board of Health to expend moneys for the suppression of an epidemic of small-pox in Bedford county and for what purposes such moneys may be used.

The power of the State Board of Health to expend moneys for the above purpose was fully reviewed and set forth in an able opinion by former Attorney General Henry C. McCormick, under date December 14, 1898, a copy of which I herewith enclose.

The purposes for which such moneys may lawfully be used are enumerated in the act of 22d July, 1897 (P. L. 315), which provides inter alia that the money shall be placed "in the hands of the treasurer of the State Board of Health, to be used for the purposes set forth in the resolution approved as aforesaid and for no other purpose."

This would seem to leave the disposition of the money with the above restriction chiefly within the discretion of the Board of Health to be exercised as its knowledge of the facts may seem to warrant.

I return herewith all papers submitted.

Very respectfully,  
FREDERIC W. FLEITZ,  
Deputy Attorney General.

**Advice of Frederic W. Fleitz, Deputy Attorney General, as to Proper Parties to Bear Expense in individual Cases of Suffering and Destitution Caused by Quarantine.**

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May 3, 1899.

Benjamin Lee, M. D., Secretary State Board of Health, 1420 Chestnut Street, Philadelphia:

Dear Sir: Your letter of 26th ult., to the Attorney General, asking for advice on the question of the cost of maintaining quarantine in cases of slight epidemics, duly received, and I am instructed by him to advise you that, under the state of facts which you set forth in your letter to him, and also in your preceding letter to the Governor, which has been referred to this Department, cases of individual destitution or suffering must be attended to by the overseers of the poor of the respective districts. The cost of maintaining quarantine and other legitimate expenses of the State Board of Health, including destruction of infected clothing, etc., would properly be paid, upon due application being made to the emergency board, out of the fund provided for that purpose.

I remain,

Very respectfully yours,

FREDERIC W. FLEITZ.

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**Opinion of John L. Kinsey, City Solicitor as to the Manner of Granting Burial Permits in the Cases of Still Born Legitimate Children.**  
Department of Law of the City of Philadelphia, City Hall,

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Philadelphia, January 6, 1899.

Benjamin Lee, M. D., Health Officer:

Dear Sir: I am in receipt of your favor of the 20th ultimo, in which you inquire whether the custom is legal which has been heretofore followed by the registration department of the Board of Health of this city in issuing burial permits to the fathers of still born children, on the certificates of physicians without the intervention of undertakers. You state that some question has been raised whether

the Board is not obliged to see that an undertaker is employed about the burial of such still born children before they issue a license therefore; the contention that they are obliged to do so being especially founded upon the act of June 7, 1895, P. L. 167, which provides for the creation of a State Board of Undertakers.

I have carefully examined the act of Assembly referred to and I find nothing therein, or in any other law, which requires that undertakers should be employed in such cases. The purpose of the act of 1895 is thus stated by the Deputy Attorney General, see 17 Pennsylvania County Court Reports, page 1004: "The object of the act of 1895 is to secure the better protection of life and health by diminishing the dangers from infectious and contagious diseases, by requiring a greater degree of efficiency on the part of those who care for and bury the dead."

I am of the opinion that the custom of granting burial permits in the manner heretofore followed is legal and permissible in the cases of still born legitimate children.

Yours respectfully,

JOHN L. KINSEY,  
City Solicitor.

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Charge of His Honor Judge Wilson on Liability of the City of Philadelphia for Injury to Life and Health by Improper and Defective Sewerage.

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Gabriel Upton vs. City of Philadelphia. Common Pleas, No. 4, March Term, 1897.

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Verdict of the jury and judgment thereon.

The verdict of the jury was for \$1,500, and judgment was entered thereon accordingly.

#### History of the Case.

Gabriel Upton, the plaintiff and appellee, became ill with typhoid fever late in October, 1895. His present action is brought for damages chiefly because of this illness, which he attributes to defectiveness of the city's sewage system in the vicinity.

Upton claimed as well for depreciation in the value of his real estate by the same cause, and interference with personal comfort at

his home. The former element he expressly withdrew because it was not made out. The court's charge and the amount of the verdict show that the jury allowed damages for Upton's illness. Whether anything was allowed for discomfort does not appear. The points of law raised before this court relate exclusively to the attack of typhoid fever.

Plaintiff himself testified to such discomfort in these words:

"Q. How did these smell's etc., which came from this sewer affect your enjoyment of your property?

"A. When we sat on the porch in the evening we could smell it up at the house, and we had to go in. The parties there that sat on the porch had to smoke cigars to keep from smelling the sewage."

In another part of his testimony he spoke of the odors in stronger terms. Plaintiff's employee in his green houses and also a tenant upon his property as well spoke of them as trying. Several other witnesses for both plaintiff and defendant had never noticed odors, though they lived as near the stream as he did. Plaintiff's calling is that of designer in knit goods. His residence is at the northeast corner of Washington lane and Chew street, in Germantown, Philadelphia, his dwelling house fronting on the north side of Washington lane, upwards of two hundred feet east of Chew street. His property is not improved upon the latter street, upon which it has a front of more than two hundred and fifty feet. At or before the time when he built his residence, about ten years ago, he erected a mill building upon his property. Such an enterprise gave a discouraging prospect subsequently, and the building was altered into two dwellings, which Upton has since rented out. This structure, as well as Upton's house, is shown upon the plan opposite page 2. As also appears from this plan, Wingohocking creek passes across that part of plaintiff's property adjacent to Chew street.

The locality northeastward from Upton's property is quite closely populated. Germantown avenue, running north to Chestnut Hill, is the spine of roads open through the section, and is also, approximately, the middle line of settlement. In 1893, or previously it was found necessary to build a sewer to take the drainage of dwellings on Germantown avenue northward from Upsal street. There was no place of ultimate discharge nearer than the Delaware, many miles away. The decomposable material it carried was small, but the rain-water and other surface drainage was large. As a makeshift arrangement this sewer was carried down the steep eastern slope of the ridge, along which Germantown avenue runs, into the open country lying in that quarter. In the meantime, as fast as money could be made available by appropriations each year, intervening portions were built to connect the sewer with older sections, adapted to convey the contents into the Delaware river.

Until this final result was accomplished more or less of the sewage passed into Wingohocking creek, a stream passing through Mr. Upton's property one hundred and seventy-five feet from his residence. This material entered by a run into which the sewage emptied from the sewer. From March, 1896, to the summer of 1898, the sewer discharged close to the main stream upon Mr. Upton's property.

Plaintiff became ill in October, 1895. It appeared that a woman, Mrs. N. P. Jones, took typhoid fever, late in March, 1896, while residing on the east side of Chew street, about one hundred feet below the point at which the creek re-entered the sewer. Mrs. C. F. Ettla, living at the southeast corner of Washington lane and Chew street, and Mrs. A. Lamb, living in one of Mr. Upton's tenant houses, took typhoid fever about November, 1896.

It was shown that two cases of typhoid fever occurred on Germantown road below Sharpsnack street, between March 15 and June 15, 1895, in a house which was connected with this sewer.

Wingohocking creek has its sources nearly a mile northwest of Upton's property.

#### Charge of the Court.

Wilson, J.—Gentlemen of the jury, this is the first case that has been tried before you, and, therefore, it is proper for me, in your hearing, and in the hearing of others who have been summoned for jury service, to say a few words in regard to the way in which you ought to approach the decision of cases which are submitted to you. It is very likely that it is not necessary that anything of that sort should be said, but it is very important that it should be understood that juries are called to make up part of a tribunal for the purpose of settling controverted questions which are to be settled between parties who are unable to settle them outside of court, and that they should be settled, not according to the wishes or preferences of either side, or according to what would be to the advantage of one side or the other, but simply according to justice and truth, no matter what effect the verdict may have. The province of a jury is to try to get at the truth, the fact, and then render verdicts accordingly. It is only in case juries do that sort of thing that justice is administered and the law properly carried out and parties can come into the court and feel that they are having their cases tried with absolute fairness.

In this case the city, as you have heard, desiring to construct a sewer for the accommodation of a certain portion of the city, did it in two parts, went to work at two ends, leaving an intervening part unfinished for a considerable period of time, and put the upper part of that sewer into use, that is, allowed people who lived in the



neighborhood to make their connections with the upper part of the sewer, and by the sewer carried the discharges of various sorts from these houses down into an open ditch or trench or stream, whatever you may choose to call it, which ran through the plaintiff's premises. In my judgment the city had no right to do that. It had no right to allow people who were contiguous to that upper portion of the sewer to make their connections with the sewer so they would cast into the stream or ditch referred to the sewage which would be gathered from those different points. If, by reason of doing that, they did the plaintiff any harm, the city is bound to answer for the consequences. All that may be true, and yet it be true, as I believe it is, that the case ought not to be looked at as one of wilful or malicious trespass upon the plaintiff's rights. Whatever he can show to you he has suffered pecuniarily, you ought, it seems to me, to cover by a verdict in his favor. There are two grounds on which he asks to have a verdict. One is that the existence of noxious smells made his dwelling place uncomfortable. That is a fair subject for estimation, but, I think you will agree with me, that it is not one which is to be regarded as a matter where you should undertake to put very large figures upon the amount of the annoyance. When you come to change a bad smell into dollars it is not an easy thing to do, and I submit that in the matter of fairness it is not a case where you ought to render a very large verdict simply because there was inconvenience and annoyance. Of course, it is to be said that this thing was permitted to last for about three years of time, or something over three years. That no doubt would aggravate the case somewhat. I do not wish to say to you that this portion of the case is to be treated in a trifling way, and yet I do desire to caution you against being carried away by any spirit of excess or unreason in the way of estimating what the plaintiff ought to be paid for such a cause. As to the amount of annoyance, it would depend somewhat upon the sensitiveness of his nerves; the acuteness of his capacity to take in bad smells. According to the testimony here, there were some of the witnesses who lived perhaps as near to the stream spoken of as he did, who do not seem to have been annoyed at all, and there were others who were annoyed. The discomfort from such a cause, of course, depends very largely upon the nature of the man or woman who is annoyed, and, it is very difficult to say what can be regarded as the money value of such inconvenience or annoyance. I consider that the smallest part of this case, provided that you are of the opinion that the other branch, which I will refer to, is ground upon which the plaintiff ought to recover.

The other ground is that he contracted typhoid fever in consequence of the condition of things which the city produced. That is a question for you to decide. The city laid great stress upon the argu-



ment that you cannot infer that there passed into this stream from typhoid fever cases which occurred further up the stream, germs which subsequently found their way into the body of the plaintiff, and then infer that this case of typhoid fever resulted from that cause. It is undoubtedly a correct principle of law that you cannot draw one inference and then another inference from that. That is a well settled principle of law. If the whole thing is a framework of guess or chance, or mere probability, then there is no ground upon which a jury could properly render a verdict. That is not the way you are to take the case. You are to take the whole case, all the evidence in it, the evidence of experts, the evidence of the conditions that existed there, the accumulation of filth in the stream, the passage of filth down the stream, the odors that existed in fact, if they did, if that condition was a menace to health, and then in connection with that, that there were in the neighborhood, right contiguous to the plaintiff's home, and about the same time, while this stream was open and in the condition referred to, several other cases of typhoid fever. What is your fair judgment in regard to it? If you think his case of typhoid fever resulted from what the city cast into that stream and upon his premises in any way, then you ought to render a verdict which would compensate him fairly for what you think he experienced in consequence. Of course he might have got typhoid fever somewhere else. Cases of typhoid fever are occurring. Some of them are cases of a group, resulting from a general condition of things, a sort of epidemic, and others are sporadic, or single cases, which occur without any possible way of probably tracing the cases back to their origin. If this was a sporadic case, if this was a case that had no connection with the cause alleged, of course, you could not say that plaintiff should be compensated by the city in consequence of his having it. The fact that you are obliged to rely on probabilities is not a fact which should necessarily determine your duty as a duty to render a verdict in favor of the defendant upon that ground. Where a person is injured by an accident in a railroad train and subsequently certain physical conditions appear, a physician is called in and he says, "I believe these conditions resulted from that accident. I must admit that they might have resulted from some other cause, but, taking everything together, I believe they resulted from that accident." The jury passing upon such a case must pass upon probabilities. So you must in nearly all cases. The question is whether, taking all the evidence, the probabilities are so strong, so overwhelming, so controlling, that you believe it is your duty to say that this case of typhoid fever was caused by what the city did in that locality by dumping sewage along there into that stream. If you believe in that way and upon such ground, upon such lines of reasoning, that the city was responsible for the typhoid fever,

then the plaintiff is entitled to be paid by the city for what he suffered in that way. What would that amount to? He says he lost ten weeks of time, and that he had been receiving \$48 a week, which would be \$480, and he paid \$50 to his physician, and a certain sum for medicine. That is all he paid out, so far as I remember. You are asked to add something for pain and suffering. So you can, if there is any evidence on that point. I do not remember that he said anything about having had any pain or suffering. Still, you might infer that he may have had some, but just like a bad smell, it is pretty hard to transfer pain and suffering into money.

I have covered the case so far as I deem it necessary to say anything to you about it. There are the two grounds on which the plaintiff asked a verdict; one is that he suffered inconvenience and annoyance in the occupation of his house in consequence of bad smells. The second is that he got typhoid fever in consequence of the condition of things which the city caused. If you think he has made out a case on either of those, then you ought to make up a verdict in his favor according to the principles I have mentioned.

Plaintiff's points withdrawn.

I have been requested by defendant's counsel to charge you.

"1. 'The jury must find a verdict for defendant.'"

I decline that point.

"2. The jury must not consider any loss or suffering plaintiff may have incurred because of the illness which he met with. His attack of typhoid fever has not been connected with the sewage which the city cast into the stream, sufficiently to justify a verdict for that cause."

I decline that point.

"3. A mere probability is not sufficient basis for a verdict of damages. Unless the jury find that Mr. Upton's illness could not have been occasioned naturally and reasonably by any other cause than germs of the disease in sewage, they must find no verdict for damages because of typhoid fever."

"That I affirm, in connection with what I have already said to you on the same question.

"4. The fact of three or four other cases of typhoid fever than Upton's in a period of two years, within the space of a few hundred feet, and in locations adjacent to the ditch or stream, would not justify the jury in inferring that the condition of the stream has caused plaintiff's illness. There is no evidence that cases of typhoid fever were confined to the time when the sewage was in the stream, or to the immediate vicinity thereof."

I decline that point.

"5. There was no conclusive evidence that the sewer cast into the

ditch or stream in question any typhoid fever germs at a time when they could have caused Mr. Upton's attack of typhoid fever. Any such assumption can be reached only by inference."

I affirm that also. There is no conclusive or distinct, direct evidence in regard to the manner in which the germs passed, or whether any passed from typhoid fever cases into this stream. You are to take the whole question in the manner in which I have already indicated to you, and decide whether or not, treating the question in that way, you think the typhoid fever of the plaintiff resulted from the condition of things which the city caused.

"6. The law does not permit inferences of fact from other facts which are themselves only matters of inference. The jury must not infer the reception of germs by Mr. Upton from the stream, if the presence of germs there is itself a matter of inference."

I answer that affirmatively, with the same remark which I made upon the previous point. You will recall what I said on the subject of probabilities determining the question. Of course, if you do not think the evidence in the case, taking it altogether, leads you to the fair, just and proper conclusion that what the city did there was the cause of the typhoid fever in some way, which perhaps you cannot accurately trace, then your verdict ought to be in favor of the city on that point, and only because you find that condition of things was the cause of the typhoid fever could you render a verdict in favor of the plaintiff on that ground.

"7. In no view of this case can Mr. Upton claim for any discomfort suffered by the other members of his household. If he can recover from discomfort at all, it must be for his personal discomfort only."

I affirm that point.

"8. Under the pleadings in this case the jury cannot find a verdict for the plaintiff's personal discomfort, because of odors or other annoyances from the ditch or creek, before or after his illness from typhoid fever."

I decline that point.

"9. The jury must not consider the question whether the presence of sewage in the ditch or stream impaired Mr. Upton's health prior to the attack of typhoid fever and rendered him liable or predisposed him to it. There is no evidence from which they can infer properly that this was the case."

I affirm that point.

"10. The jury must not consider any question of depreciation of the value of real estate in this case, nor of a reduction or loss of rents, that item of claim having been withdrawn by the plaintiff's attorney."

Plaintiff's counsel excepted to the affirmance by the learned judge of the third, fifth, seventh, eighth, ninth and tenth points presented by defendant.

Defendant's counsel excepted to the charge of the learned judge as follows:

First. So far as it allowed the question of damages for typhoid fever to go to the jury.

Second. So far as it allowed the question of discomfort to go to the jury.

Third. To the following portions of the charge of the learned judge: "If you think his case of typhoid fever resulted from what the city cast into that stream and upon his premises in any way, then you ought to render a verdict which would compensate him fairly for what you think he experienced in consequence."

"Where a person is injured by an accident in a railroad train subsequently certain physical conditions appear, a physician is called in and he says, 'I believe these conditions resulted from that accident. I must admit that they might have resulted from some other cause, but, taking everything together, I believe they resulted from that accident.' The jury passing upon such a case must pass upon probabilities."

Defendant's counsel also excepted to the refusal of the learned court to charge as requested in the first, second, fourth and eighth points presented by him.

Defendant's counsel also excepted to the answers of the learned judge to the third, fifth and sixth points presented by him.

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The subsequent history of this case is as follows:

The verdict of the court of common pleas was appealed from to the Supreme Court of the State, and the paper books on each side were made up. Before the case came up for trial, however, the city solicitor concluded that it would be better not to press it to a final decision. The city therefore made an offer of the payment of a sum which substantially amounted to the same thing as the verdict of the jury. The result, therefore, must be looked upon as a very substantial gain on the side of sanitation.

BENJAMIN LEE,  
Secretary.

CORRESPONDENCE.

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## Plans with Regard to Disinfection of Troops Sent from the West Indies to Camp Meade, Pennsylvania.

March 20, 1899.

Surgeon General Walter Wyman, U. S. M. H. S., Washington, D. C.:

Dear Sir: In connection with the proposal of the War Department to send a large contingent of troops from the West Indies to the camp established last summer at Middletown in this State, I note in the papers a statement that the "Surgeon General" has interposed objections to the contemplated movement on the ground that there would be a danger of bringing infection into the State. I am at a loss to know, however, whether the Surgeon General referred to is yourself, Dr. Sternberg, or Dr. Shoemaker, the newly appointed Surgeon General of the National Guard of this State.

Independently of that question, however, I should be extremely glad to have a somewhat full opinion from yourself as to the expediency of the proposed course. We have already, as you probably know, had both small-pox, and, as I feel quite certain, in one instance, yellow fever brought into the State by soldiers from Porto Rico. In both instances it evidently came in effects and not in the person of the soldier, and my own feeling is that it is there that the danger lies. I am perfectly confident that the searching examination which your service would give the soldiers would prevent any passing quarantine who would be in the slightest danger of carrying infective disease in their system. But the difficulties of thorough disinfection of the packages and personal effects of the soldiers I know to be extreme. I also felt that great good judgment was exercised in the selection of Montauk Point as a camp of detention last summer. There were serious objections, however, to its maintenance as a permanent camp, and it would be by no means so well adapted for a winter as for a summer point of detention. There is another side to the question with which of course your service is not directly concerned. That is the fact that very shortly after the occupancy of Camp Meade, typhoid fever made its appearance and many cases developed. I believe that the same result would inevitably follow if a large body of troops were again brought there.

It is an axiom of military hygienists that "old camps should not be re-occupied."

If you cannot find time to write me somewhat at length in regard to this matter advise me, and if you will make an early appointment I will run down to Washington and talk the matter over with you.

Yours very truly,

BENJAMIN LEE,  
Secretary.

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Reply.

Washington, D. C., March 21, 1899.

Dr. Benjamin Lee, Secretary State Board of Health, Philadelphia, Pa.:

Dear Sir: In answer to your letter of the 20th instant, just received, the Surgeon General who has interposed objections to the contemplated sending of troops from the West Indies to Camp Meade was some other Surgeon General than myself. The plan which I have outlined to the War Department and which is being carried on now is as follows:

After April 1st the close quarantine season begins at points south of the southern boundary of Maryland, that is to say vessels would be detained arriving from Cuba at such ports. To avoid this detention some twelve or thirteen thousand troops are now being hurried from Cuba, the troops being those enlisted in the south. The quarantine regulations require that the baggage of all these troops shall be disinfected and arrangements have been made for doing this at the southern quarantine stations. It is going on now. After April 1st the remaining troops in Cuba, whom it is intended to have return to the United States, can come to those points only which are north of the southern boundary of Maryland, and their baggage also must be disinfected. I may say that all these troops are being brought back to be mustered out. The mustering out process requires about one month for each regiment. The troops coming north after April 1st, after their baggage has been disinfected and they have passed the quarantine examination, will be sent immediately to interior states where they were recruited and where there are armories, barracks, or other accommodations for their one month's encampment. Camp Meade will probably not be used until the latter part of April when the weather is warmer and in all probability there will only be six or seven thousand soldiers quartered there, and they for only this limited period of time, viz., about one month.

In the meantime we have a disinfecting barge at Habana and it

is not unlikely that a number of vessels may be made perfectly safe, baggage disinfected, etc., before leaving Habana.

I trust I have made the matter plain to you. I have been giving it a great deal of attention the past two or three weeks and everything is now operating well and I believe with safety.

Respectfully yours,

WALTER WYMAN,  
Surgeon General, M. H. S.

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March 22, 1899.

Surgeon General Walter Wyman, U. S. M. H. S., Washington, D. C.:

Dear Sir: With reference to the proposed bringing of the troops from the West Indies to this State, would the idea be to bring them by sea to the Delaware and have them pass inspection at the Breakwater and Reedy Island, or would they be landed at the Breakwater and be brought up to the State by rail. As I understand it, up to the present time the facilities of disinfection at the Lewes Station have been quite inadequate. It occurs to me that even if disinfection were performed at Havana, it would be desirable that a second inspection of the most careful kind should be made on arriving at one of our ports.

Yours very truly,

BENJAMIN LEE,  
Secretary.

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Reply.

Washington, D. C., March 23, 1899.

Dr. Benjamin Lee, Secretary State Board of Health, Philadelphia, Pa.:

Sir: In reply to your letter of the 22d, regarding the proposed bringing of troops from the West Indies to Camp Meade, I have to state that the plan contemplated is, after April 1st, to have as much of the disinfection as is possible done at the port of departure, a quarantine inspection to be made at the Delaware Breakwater and again if need be at the Reedy Island Quarantine. It is proposed to increase the facilities for disinfection at the Breakwater temporarily and the two chambers at the Reedy Island Station are capable of rapid and effective work.

Respectfully yours,

WALTER WYMAN,  
Surgeon General, M. H. S.



**Placarding Houses in Contagious Diseases.**

York, Pa., June 17, 1899.

Dr. Benjamin Lee, Secretary State Board of Health:

Dear Doctor: Owing to the different construction by our members of the local board of the act relative to the placarding of houses, etc., in case of contagious diseases, I have been authorized by the board to make inquiry so that the matter may be clear to all, would therefore ask you to kindly help us, so that we may not discriminate by any erroneous views we may have.

First. "Is placarding compulsory," or can it be discontinued by the will of the local board at any time?

In our city we placarded the principle or main entrance, now we are having different views as to that of a boarding house, hotel as well as of the hospital (which is a general one).

Second. Should a hotel or boarding house be placarded on the main entrance, or only on the individual's room door?

Third. Should the hospital be placarded in like manner, or not at all (when there is no isolation building)?

Some of the members hold to the view of placarding all main entrances and that any thing less public would be discriminating unjustly against a private residence, and that in all cases, the main or most public entrance should be selected.

You will greatly oblige us by an early reply in the matter. We are,  
Yours respectfully,

S. K. PFALTZGRAFF.

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Reply.

June 19, 1899.

Mr. S. K. Pfaltzgraff, President Board of Health, York, Pa.:

Dear Sir: Replying to your favor of the 17th inst., in which you make several inquiries with regard to the construction of the act relative to the placarding of houses, I would say, first, that the law allows local boards of health entire discretion in that matter. The Board can therefore use its judgment as to whether in any particular case or at any particular time placarding is desirable. As a rule my experience has led me to think that, especially in small towns and cities which have not a very large police force, placarding is the most effective and at the same time the most economical method of promoting quarantine. It enlists the entire community as the guards of the infected house. Where a house has an entrance from a street or alley on the rear, we advise placarding that as well as the front entrance.



Secondly, with regard to houses occupied by more than one family, such as hotels, boarding houses and hospitals, if the Board is satisfied, after careful inspection and consideration of all the circumstances, that the public can be protected by the quarantine of a section of the house, as a story or a part of a story, or even in the cases of a single room, this is allowable.

Of course such action may lay the Board open to criticism on the ground of favoritism. A Board must, however, be willing to accept such criticism. Such a modification will necessarily require the issuing of extremely strict regulations as regards the maintenance of the quarantine within the house or building. No communication should be allowed between the infected portion and other portions of the house, and the intervening atmosphere should be disinfected. To put the matter in a nutshell, it is the duty of the Board of Health to protect the public with the least possible infliction of inconvenience and loss to the individual.

I send you circulars as requested.

Wishing you success in your efforts, I am,

Yours very truly,

BENJAMIN LEE,  
Secretary.

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### Registration of Deaths.

Department of the Interior, Census Office,

Washington, D. C., June 29, 1899.

Dr. Benj. Lee, Secretary State Board of Health, 1420 Chestnut Street, Philadelphia, Pa.:

Sir: This office desires to secure accurate information concerning the registration of deaths in the various states and I therefore address you upon the subject.

The information from your State is indicated by the following questions:

1. Have you any State law requiring the registration of deaths in all parts of the State?
2. Is it uniformly in operation in all parts of the State?
3. Is a general form of return prescribed and used in all parts? If there are any exceptions, please specify the cities or towns using any different form?
4. Are the original returns transmitted to your (or any) central office, or are they retained by the local officers, and if retained by the local officers, is there any general system of filing them maintained for reference?

5. What percentage of the whole number of deaths that occur do you estimate to be reported?

6. Do you compile and publish annual reports giving tabulated statistics of deaths returned? If so, what is the official year covered by such reports?

Please furnish me with two or three copies of the blank forms used in making the returns of deaths. If you have them in convenient shape, I would like a copy of the law governing the registration, with such instructions as you may furnish local officers relative to securing, recording or preserving, and forwarding returns, and such annual reports, pamphlets, and circulars upon the subject as you may have available.

The census law authorizes the director to withdraw the mortality schedule from the enumerators and to obtain the data required by the same from the records of states and cities maintaining, in his judgment, a satisfactory system of registering deaths. It therefore becomes important to ascertain all such areas as maintain any system of registration whatever, the sufficiency of the same (degree of completeness in which the deaths occurring are reported), the character of the data required by the local form of return used, and the facilities for obtaining transcripts of the returns. Upon the later point it will be apparent to you that the work will be greatly facilitated if the copy can be secured for the whole State from one central office.

Any other information upon the subject, not directly covered by the inquiries above, will be appreciated.

A return penalty envelope and several labels are enclosed with which you may send your reply and any documents for me without cost or other address.

Very respectfully,

W. A. KING,  
Chief Statistician.

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Reply.

June 30, 1899.

Mr. W. A. King, Chief Statistician, Census Office, Washington, D. C.:

Dear Sir: Replying to yours of yesterday, asking for information with reference to the registration of deaths in this State, I have to reply as follows:

1. The State law requires the clerk of the orphans' court of each county to keep a separate record of all births and of all deaths.
2. This law is uniformly in operation in all parts of the State.

3. The law prescribes a definite form of return used in all particulars without exception.

4. The original returns are not transmitted to any central office, but are retained by the local officers. They must be kept in a statute book, must contain the full name, color, sex, age, married or single, place of birth, occupation, date and place of death, cause of death, duration of illness, place and date of interment; if a minor, the name of the father and mother, and date of making the record; record to be alphabetically indexed.

5. I would not venture on an estimate of the percentage of whole number of deaths that occur which are reported. The system is a loose one, inasmuch as the reports are collected by the assessors of the several townships, boroughs and wards semi-annually.

I take pleasure in sending you our last published annual report, by which you will see that we only attempt to give the statistics of certain of the larger cities and boroughs. The enclosed form for a burial permit is used throughout the State quite generally, wherever burial permits are required. This however, is only in incorporated boroughs and cities which have established boards of health. In all of the larger cities there is a system of registration by the board of health, in addition to the State registration. I have been laboring with the Legislature for the last twelve years to persuade them to establish a proper system of registration of vital statistics at the Capitol of the State, but so far without effect. If you find it necessary to communicate with the Governor of the State, or any other prominent officials with regard to this matter, I should be indebted if you would represent as strongly as possible the barbarity of our condition.

Yours very truly,

BENJAMIN LEE,  
Secretary.

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Description of Sewage Disposal Plan of the Roman Catholic Protectory for Boys at Fatland, Montgomery County.

July 18, 1899.

Benjamin Lee, M. D.:

Dear Sir: I enclose a description of the plan of sewage disposal in use at the Philadelphia Protectory for Boys which I hope will be satisfactory to the State Board of Health. I enclose also the opinion of General Thayer, a member of the committee that had charge of the work.

Sincerely,

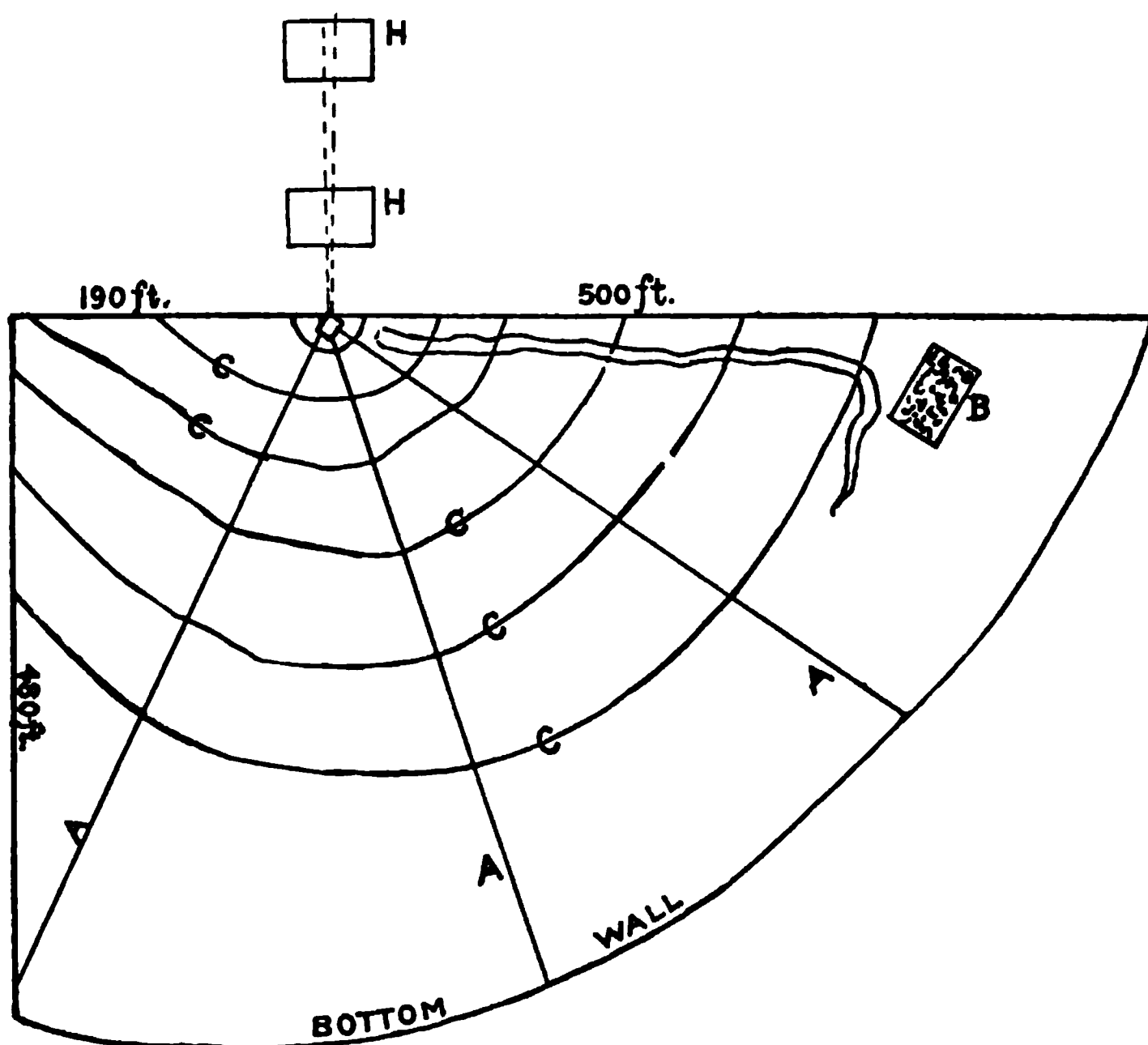
JAMES P. TURNER,  
Secretary.

Protectory, Pawling P. O., Pa.,

July 12, 1899.

Dear Bishop Pendergast:

In reply to yours of yesterday would say that our sewage plant is built on the evaporating system. The sewage is led by six inch pipe of cast iron about four hundred feet from the building, then through a terra cotta pipe the balance of two thousand feet, where distribution takes place. Before reaching this point it passes through three pits where it passes through various grades of screening. The distributing apparatus consists of a small brick structure sixteen inches high and about ten feet long by about twelve feet having a cemented central area about five feet across by eight feet longest way. There are four pipes leading from this central area, leading to the four evaporating areas into which the whole plant is divided, and having flap valves to shut off or turn the liquid to one or more of the areas. The whole evaporating plant is of triangular form about 680 feet on upper line at right angles to pipe line; about 450 feet on one side,



"A" are division walls; "C" distributing walls; "O" is ditch 36x42", filled with broken stone for winter service; "H" pits with screens.

the bottom being circular, 780 feet terminating in one side. This is divided as aforesaid into four nearly equal areas by walls of red shale. These areas are crossed by firm low walls about eight feet by twelve feet of broken stone to prevent a too rapid flow and to aid

in distributing the sewage over the surface of the ground. The side and bottom have walls built to protect overflow.

There is a fall of about eight feet in the four hundred and fifty. The sewage reaches down about one-third to one-half the distance of the evaporating areas before being absorbed and evaporated.

I regret that we have no original plan or copy of it here. A rough pen sketch may make some points clearer.

Respectfully submitted,

BRO. CANDIDLU.

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Philadelphia, July 15, 1899.

Dr. Benjamin Lee, Secretary, State Board of Health, Philadelphia:

Dear Sir: I desire to add a few remarks, supplementary to the description of the sewage disposal system, which is in operation satisfactorily at the Protectory.

As a member of the committee having charge of the matter at the time, I carefully inspected the grounds, which are used for the purpose of disposal of the sewage, and also examined the plans which were presented for our approval, and I am satisfied, as an engineer, that the system which is in operation at the Protectory is safe and satisfactory from a sanitary point of view, and that no deleterious matter can in any way reach the Schuylkill river.

Yours respectfully,

RUSSELL THAYER,

M. Am. Soc. C. E.

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#### Proposed Drainage of Sewage into Fishing Creek.

Bloomsburg, Pa., September 2, 1899.

Benj. Lee, M. D., Secretary State Board of Health of Pennsylvania:

Dear Doctor: We would ask you to be kind enough to advise us in the following case:

Our town is supplied with pure water by pumping from Fishing creek into reservoirs. Millville borough is located ten miles above us on the banks of Little Fishing creek, which joins Big Fishing creek two miles above pumping station. New Millville borough proposes introducing a system of sewage for the town, which will empty into Little Fishing creek. What we want is to prevent Millville or any other town or individual sewerage into the creek. No doubt similar cases have been before you. Would therefore ask you to ad-

advise us whether we can do anything to prevent such pollution of stream, and if so tell us how to proceed. Your prompt reply will be appreciated. Thanking you in advance.

I remain,

Yours very truly,

W. M. REBER,  
Secretary Board of Health.

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Reply.

September 5, 1899.

Dr. W. M. Reeber, Secretary Board of Health, Bloomsburg, Pa.:

Dear Doctor: The last Legislature decided that the only people in this State who ought not to drink sewage are the citizens of cities of the first class. It is your misfortune and not your fault, therefore, that you do not live in Philadelphia. The State Board of Health has no power to issue a mandamus. This can only be done by the courts. Our Board could make an inspection of Fishing creek, and determine whether, if Milville borough should introduce a system of sewerage, it would necessarily render your water unfit for drinking purposes; and such opinion would be of considerable value to you in case you took out a mandamus. This inspection would be at the expense of your borough, and would include bacteriological and chemical analyses.

Yours very truly,

BENJAMIN LEE,  
Secretary.

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Organization of Township School Boards as Boards of Health.

Nicholson, Pa., September 19, 1899.

Benj. Lee, Secretary and Executive Officer, Harrisburg, Pa.:

Dear Sir: Your circular of August 25 received, and I beg to write to you for a little information regarding our authority in this matter.

Our borough is without any board of health and at the same time our school boards thinks we ought to act as per your instructions as we have a large school here and cannot afford to run any risk. We had a meeting last evening and decided to hire a physician to go to the school and vaccinate all the scholars, but the question arose have we a right to pay the expenses of doing this out of our school funds? And again there are a few parents who say they will take their children out of school rather than allow them to be vaccinated. This

action will of course compel us to resort to the compulsory school law, would it not? Also our borough being without a board of health could we not organize a board of health among our school board, and if so, where would the funds come from to hire a sanitary officer and other expenses.

They have had a board of health organized here several times in the past, but it never amounted to anything and died out in a few weeks, and at present we are without any. Hoping to hear from you soon.

I remain,

Your obedient servant,

W. E. WARNER,  
Secretary School Board.

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Reply.

September 21, 1899.

Mr. W. E. Warner, Secretary School Board, Nicholson, Pa.:

Dear Sir: Replying to your favor of the 19th inst., I would say, that if the limits of your school district are the borough of Nicholson, I do not consider that the law entitles you to act as a board of health. If, on the other hand, it includes portions of the adjacent township or townships you can organize for such districts. It is the duty of the president of the borough council to immediately fill all vacancies which may exist on the board of health, and the council to furnish the necessary funds for vaccinating those who are unable to bear the expense. This should be done without delay.

My advice is, that if the president and council decline or refuse to take action, your board should apply for a mandamus compelling them to do so. Our Board has always considered that the law forbidding officers to be members of a board of health did not extend to members of school boards. I see no reason why the president could not appoint at least a majority from the members of your board. I presume from what you say that they would be willing to serve. There is, as you say, an apparent conflict between the compulsory vaccination law and the compulsory attendance law. The vaccination law having been passed last takes the precedence. If parents refuse to send their children rather than to have them vaccinated they certainly make themselves amenable to the penalty of the compulsory attendance law. I am extremely glad to know that your Board is taking up this matter in an energetic way. With regard to the uses of the school funds, I do not think the law would allow it within the borough limits.

Yours very truly,

BENJAMIN LEE,  
Secretary.

Should Typhoid Fever in a Family Exclude a Child from such Family  
from School.

Sharon, Pa., October 7, 1899.

Benjamin Lee, Esq., Secretary State Board of Health:

Dear Sir: Would you kindly let me know whether it is customary to quarantine against typhoid fever if it is considered contagious, and whether children should be prohibited from attending school if there is a case of fever in the child's home. Thanking you for any information you may give me.

I am respectfully,

HARRY TAYLOR,  
Sharon Health Officer.

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Reply.

October 9, 1899.

Mr. Harry Taylor, Health Officer, Sharon, Pa.:

Dear Sir: Replying to your favor of the 5th inst., I would say that, neither the State law nor the regulations of the State Board of Health require that a house in which typhoid fever exists should be quarantined, or that children living therein should be detained from school. This is for the reason that it is not now considered that typhoid fever is contagious in the sense that small-pox, for instance, is, but that it is only communicated through food and water.

Yours very truly,

BENJAMIN LEE,  
Secretary.

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Should Water be Conveyed in Lead Lined Pipes?

Freeland, Pa., October 20, 1899.

Dr. Benjamin Lee, Secretary State Board of Health:

Dear Sir: The Water Company here in our borough propose using pipe, connecting water main with houses—lined with a coating of lead—about an one-eighth to one-fourth inch in thickness. A Philadelphia firm manufactures them. Will you kindly inform me whether this should be allowed?

And oblige,

Yours truly,  
J. HOWARD CLOUD, M. D.,  
Secretary Board of Health.



University of Pennsylvania,  
Laboratory of Hygiene,  
Philadelphia, October 24, 1899.

Dr. Benjamin Lee, Secretary of the State Board of Health, 1420  
Chestnut Street, Philadelphia:

My Dear Doctor: Yours of the 23d inst., with the letter of Dr. J. Howard Cloud, of Freeland, Pa., enclosed, is at hand. In regard to the use of lead pipe by the Water Company of Freeland, Pa., I would say that this should not be permitted. As you state in your letter, with water of a certain degree of hardness there is in time an incrustation of salts in the interior of lead pipes; but, as we know nothing of the character of the Freeland water, and since we know that there is danger in the use of lead pipes, even though they do form a coating of salts under certain conditions, I would advise against the use of such pipes under any conditions whatever. I would consider it unsafe to do so.

Very truly yours,  
D. H. BERGEY,  
Chemist State Board of Health.

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Executive Office, 1420 Chestnut Street,  
Philadelphia, January 23, 1899.

(Sent to Medical Journals in New York State and Pennsylvania.)

To the Editor:

Sir: At the last meeting of the State Board of Health of Pennsylvania, a report by the deputy inspector of the Pocono District was read, presenting facts which demonstrated the climatic value of that mountainous section of the State. Physicians are often at a loss to know where to send convalescents and those who have manifested a susceptibility to the tuberculous infection, from the fact that not only the pecuniary means of the patients but numerous other circumstances make it undesirable to advise them to go a great distance from home. The Board considered that the information contained in this report would be welcomed by such practitioners, and therefore instructed its Secretary to address a brief communication to the Medical Journals of the country, calling attention to the same. The following is a brief abstract of the report:

It showed that during the year the entire district had been free from epidemics of a serious character. Only two cases of typhoid

fever occurred and both of these were unquestionably of foreign origin, the patients returning from a distance to be taken ill at home.

Four cases of diphtheria and five of scarlet rash constituted the entire list of contagious diseases. Malarial affections were conspicuous by their entire absence. The total permanent population of this region is three thousand, nine hundred and fifty (3,950) but as it contains within its borders a large number of summer resorts the population during that season is greatly increased. The altitude at Mount Pocono, which may be called the central station of the Delaware, Lackawanna and Western Railroad, is 1,800 feet above the level of the sea; while within a radius of two or three miles from this point accommodations can be found ranging from first class hotels to comfortable farm houses, with a corresponding tariff of expense, at altitudes varying from 1,400 to 2,200 feet. The soil, being composed of sand, gravel and stone, constitutes a natural filter bed. For this reason, the drainage is generally perfect; all surface water disappearing with great rapidity after a heavy rain. Streams of crystal clearness and uniformly cold abound in the valleys, and the hill sides are full of springs. Bacteriological examination of a sample of spring water proved it to be, to all intents and purposes, sterile, not even containing germs of a harmless nature. Hygrometric tests indicate that the average humidity of the atmosphere in the valleys of this region is distinctly below that of our seaboard cities. The temperature in summer ranges about ten degrees below that of New York and Philadelphia. Phthisical cases are found to do well in this pure atmosphere, and there are many cases on record where those who have gone there in the early stages of the disease have been restored to health.

It will thus be seen that we have, almost at our doors as it were a natural sanitarium, presenting most of the advantages attached to more distant climates famed for their salubrity, and without the debilitating qualities of those of the far south.

Yours respectfully,

(Signed.)

BENJAMIN LEE, M. D.,  
Secretary.

## APPENDIX L.

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### ORGANIZATION, BY-LAWS AND REGULATIONS OF THE STATE BOARD OF HEALTH AND VITAL STATISTICS.

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#### Officers and Members.

President, John Fulton, C. E., Johnstown.

Secretary, Benjamin Lee, M. D., Philadelphia.

Members, John Fulton, C. E., Johnstown; J. H. McClelland, M. D., Pittsburgh; Philip A. Boyer, M. D., Selinsgrove; Hon. Samuel T. Davis, M. D., Lancaster; Richard Y. Cook, Esq., Philadelphia; Charles H. Harvey, M. D., Philadelphia; Benjamin Lee, M. D., 1420 Chestnut street, Philadelphia.

Place of meeting—Supreme Court Room, State Capitol, Harrisburg (unless otherwise ordered). Janitor—John Harner, 1417 North Third street, Harrisburg.

Time of meeting—Second Thursday in May, July and November, at 4 P. M.

#### Standing Committees.

I. Executive Committee—Richard Y. Cook, chairman; Charles H. Harvey, M. D., and Benjamin Lee, M. D., secretary. Place of meeting, executive office, 1420 Chestnut street, Philadelphia.

II. Committee on Registration and Vital Statistics—Dr. Benjamin Lee and Dr. Samuel T. Davis. Bureau of Registration of Vital Statistics, Department of Internal Affairs, State Capitol, Harrisburg. State Superintendent of Registration of Vital Statistics, Benjamin Lee, M. D. Registrars of Marriages, Births and Deaths, all clerks of Orphans' Courts. Registrars of Practitioners of Medicine and Surgery, all Prothonotaries.

III. Committee on Preventable Diseases, Disinfection and Supervision of Travel and Traffic—Charles H. Harvey, M. D., chairman, and Samuel T. Davis, M. D..

IV. Committee on Water Supply, Drainage, Sewerage, Topography and Mines—John Fulton, C. E., chairman, and J. H. McClelland, M. D.

V. Committee on Public Institutions and School Hygiene—S. T. Davis, M. D., chairman, and Charles H. Harvey, M. D.

VI. Committee on Adulterations, Poisons, Explosives, and other Special Sources of Danger to Life and Limb—Philip A. Boyer, M. D., chairman, and Richard Y. Cook.

VII. Committee on Sanitary Legislation, Rules and Regulations—James H. McClelland, M. D., chairman, and Benjamin Lee, M. D.

The President is a member ex-officio of all committees.

#### County Medical Inspectors.

G. Rice, M. D., McSherrystown, Adams county.

S. M. Rinehart, M. D., Allegheny county.

S. A. S. Jessop, M. D., Kittanning, Armstrong county.

H. S. McConnell, M. D., New Brighton, Beaver county.

H. Howard Hill, M. D., Everett, Bedford county.

Wm. M. Findley, M. D., Altoona, Blair county.

S. M. Woodburn, M. D., Towanda, Bradford county.

Daniel Longaker, M. D., Reading, Berks county.

John E. Byers, M. D., Butler county.

W. E. Matthews, M. D., Johnstown, Cambria county.

E. O. Bardwell, M. D., Cameron county.

J. B. Tweedle, M. D., Weatherly, Carbon county.

George F. Harris, M. D., Bellefonte, Centre county.

J. G. Shoemaker, M. D., Phoenixville, Chester county.

J. C. Mewhinney, Spring City, Chester county (assistant).

H. N. Hess, M. D., Fryburg, Clarion county.

Spencer M. Free, M. D., DuBois, Clearfield county.

R. B. Watson, M. D., Lock Haven, Clinton county.

W. G. Johnston, M. D., Titusville, Columbia county.

Harvey B. Bashore, M. D., West Fairview, Cumberland county.

Paul A. Hartman, M. D., Harrisburg, Dauphin county.

Robert S. Maison, M. D., Chester, Delaware county.

W. L. Williams, M. D., Ridgway, Elk county.

C. B. Kibler, M. D., Corry, Erie county.

T. H. White, M. D., Connellsville, Fayette county.

J. W. Morrow, M. D., Tionesta, Forest county.

P. B. Montgomery, M. D., Chambersburg, Franklin county.

Frank R. Shoemaker, M. D., Hustontown, Fulton county.

John T. Iams, M. D., Waynesburg, Greene county.

A. B. Brumbaugh, M. D., Huntingdon, Huntingdon county.

N. F. Ehrenfeld, M. D., Indiana, Indiana county.

A. F. Balmer, M. D., Brookville, Jefferson county.

Wm. H. Banks, M. D., Mifflintown, Juniata county.

H. V. Logan, M. D., Scranton, Lackawanna county.

M. W. Raub, M. D., Lancaster, Lancaster county.  
W. Pratt, M. D., Dushore, Sullivan county  
J. D. Moore, M. D., New Castle, Lawrence county.  
Morris F. Cawley, M. D., Allentown, Lehigh county.  
S. P. Heilman, M. D., Heilmandale, Lebanon county.  
Chas. P. Knapp, M. D., Wyoming, Luzerne county.  
A. Richter, M. D., Williamsport, Lycoming county.  
Burg Chadwick, M. D., Smethport, McKean county.  
T. M. Cooley, M. D., Sandy Lake, Mercer county.  
A. T. Hamilton, M. D., Lewistown, Mifflin county.  
W. E. Gregory, M. D., Stroudsburg, Monroe county.  
H. H. Whitcomb, M. D., Norristown, Montgomery county.  
Edward A. Curry, M. D., Danville, Montour county.  
Thomas C. Zulick, M. D., Easton, Northampton county.  
A. C. Clark, M. D., Sunbury, Northumberland county.  
A. R. Johnston, M. D., New Bloomfield, Perry county.  
Wm. B. Atkinson, M. D., Philadelphia, Philadelphia county.  
Wm. B. Kenworthy, M. D., Pike county.  
E. H. Ashcraft, M. D., Coudersport, Potter county.  
A. H. Halberstadt, M. D., Pottsville, Schuylkill county.  
F. J. Wagenseller, M. D., Selinsgrove, Snyder county.  
Theodore Wright, M. D., Dushore, Sullivan county.  
C. S. Logan, M. D., Arnot, Tioga county.  
Wm. Leiser, Jr., M. D., Lewisburg, Union county.  
J. P. Strayer, M. D., Oil City, Venango county.  
W. M. Robertson, M. D., Warren, Warren county.  
C. B. Wood, M. D., Monongahela, Washington county.  
H. A. Plum, M. D., Hawley, Wayne county.  
Robert B. Hammer, M. D., Greensburg, Westmoreland county.  
B. E. Bidleman, M. D., Tunkhannock, Wyoming county.  
I. C. Gable, M. D., York, York county.

#### Engineer Inspectors.

Eastern District—William H. Boardman, C. E., Philadelphia.

Western District—Northern Division, James H. Harlow, C. E., Edgewood.

Western District—Southern Division, Thomas P. Roberts, C. E., Pittsburgh.

#### Bacteriologist.

Professor W. M. L. Coplin, M. D., Jefferson Medical College, Philadelphia.

### Assistant Bacteriologists.

Eastern District—Robert L. Pitfield, M. D., Philadelphia.

Monroe County—Richard Slee, M. D., Swiftwater.

Western District—Thos. Turnbull, M. D., Allegheny.

### Chemists.

Eastern District—Laboratory of Hygiene, University of Pennsylvania, Philadelphia.

Western District—Professor F. C. Phillips, Western University of Pennsylvania, Allegheny.

### Constitution.

The constitution of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania is the act of Legislature establishing the Board, approved June 3, 1885, of which the following is the correct text:

### AN ACT

To establish a State Board of Health for the better protection of life and health, and to prevent the spread of contagious and infectious diseases in this Commonwealth.

Manner of appointment.

Number of members.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That the Governor by and with the advice and consent of the Senate, shall appoint six persons, a majority of whom shall be physicians of good standing, graduates of regularly chartered and legally constituted medical colleges, and of not less than ten years' experience in the practice of their profession, and one of whom shall be a civil engineer, who, together with the secretary, the mode of whose appointment is hereinafter provided for, shall constitute and be designated as the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Of the six persons first appointed two shall serve for two years, two for four years and two for six years, from the first day of July next following their confirmation; and the Governor shall thereafter biennially appoint, by and with the advice

and consent of the Senate, two persons of the same professions as those whose terms of office have just expired, to be members of said Board, to hold their offices for six years from the first day of July next following their confirmation, and until their successors are appointed, excepting the secretary, who shall continue in office as hereinafter provided; but any member may be reappointed. Any vacancy occurring in said board during a recess of the Legislature shall be filled by the Governor until the next regular session of the same.

Term of service.

Section 2. As soon as possible after the appointment of the first six persons as aforesaid, they shall meet in the office of the Secretary of the Commonwealth, and shall proceed, under the direction of the latter officer, to determine, by lot, which of them shall serve for the respective terms of two, four and six years. Before entering upon the duties of the office they shall take the oath prescribed for State officers by the Constitution of the State, and shall file the same in the office of the Secretary of the Commonwealth, who, upon receiving the said oath of office, shall issue to each a certificate of appointment for his respective term of office determined as aforesaid; upon receiving which they shall possess and exercise the powers and perform the duties of said Board as defined in this act. Immediately after having taken the oath of office they shall organize by electing one of their number to be president, and by appointing a proper person, who shall be a physician of good standing, of not less than ten years' professional experience, and a graduate of a legally constituted medical college, to be secretary of said Board, who shall hold his appointment until removed by the appointment of his successor or otherwise. The Board may elect one of its own members secretary, in which case the vacancy thus created shall be filled by the Governor in the same manner as a vacancy caused in any other way. The president shall be elected annually. No member of the Board, except the secretary, shall, as such, receive any salary; but the actual traveling and other expenses of any member while engaged on the actual duties of the Board, shall be allowed and paid on presentation to, and approval by the Auditor General of an itemized account, with vouchers annexed.

Manner of organization.

Appointment of secretary.

Actual expenses of members to be paid.

Section 3. The secretary shall be the executive

Duties of secretary.

Salary of Secretary.

officer of the Board, and shall have all the powers and privileges of a member of said Board, except in regard to voting upon matters relating to his own office and duties as secretary. He shall receive an annual salary of two thousand dollars, which shall be paid him in the same manner that salaries of other State officials are paid; and such necessary expenses as the Auditor General shall audit, on presentation of an itemized account with vouchers annexed and the certificate of the Board, shall be allowed him.

Time and place of meeting.

Section 4. The said Board shall meet at least once every six months, and may also hold special meetings as frequently as the proper and efficient discharge of its duties shall require, in the Capitol building at Harrisburg (unless otherwise ordered), and the rules and by-laws of the Board shall provide for the giving of proper and timely notice of all such meetings to every member of the board. The Secretary of Internal Affairs shall provide and furnish such apartments and stationery as said Board may require in the discharge of its duties. A majority of the members of the Board shall, at any regular, called or adjourned meeting, organize and constitute a quorum for the transaction of business.

Duties and functions of board defined.

Section 5. The State Board of Health and Vital Statistics shall have the general supervision of the interests of the health and lives of the citizens of the Commonwealth, and shall especially study its vital statistics. It shall make sanitary investigations and inquiries respecting the causes of disease, and especially of epidemic diseases, including those of domestic animals, the sources of mortality, and the effects of localities, employments, conditions, habits, food, beverages and medicine on the health of the people. It shall also disseminate information upon these and similar subjects among the people. It shall, when required by the Governor or the Legislature, and at such other times as it deems it important, institute sanitary inspections of public institutions or places throughout the State. It shall codify and suggest amendments to the sanitary laws of the Commonwealth and shall have power to enforce such regulations as will tend to limit the progress of epidemic diseases.

Powers of board.

Section 6. In cities, boroughs, districts and places



having no local boards of health, or in case the sanitary laws or regulations in places where boards of health or health officers exist should be inoperative, the State Board of Health shall have power and authority to order nuisances, or the cause of any special disease or mortality to be abated and removed, and to enforce quarantine regulations as said Board shall direct.

Any person who shall fail to obey, or shall violate, such order shall, on conviction, be sentenced to pay a fine of not more than one hundred dollars at the discretion of the court.

Penalty for violation and neglect.

Section 7. It shall be the duty of the State Board of Health and Vital Statistics to have general supervision of the State system of registration of births, marriages and deaths, of prevalent diseases, and of practitioners of medicine and surgery, to prepare the necessary methods, forms and blanks for obtaining and preserving such records, and to insure the faithful registration of the same in the several counties and in the Central Bureau of Vital Statistics at the Capitol of the State. The said Board shall recommend such forms and amendments of laws as shall be deemed to be necessary for the thorough organization and efficiency of the registration of vital statistics throughout the State. The secretary of the State Board of Health and Vital Statistics shall be the superintendent of registration of vital statistics as supervised by said Board; the clerical duties and safe keeping of the bureau of vital statistics thus created shall be provided for by the Secretary of Internal Affairs, who shall also provide and furnish such apartments and stationery as said Board shall require in the discharge of such duties.

Functions of board in registration.

Secretary of Internal Affairs to provide stationery and apartments.

Section 8. It shall be the duty of all health officers and boards of health in the State to communicate to said State Board of Health copies of all their reports and publications and also such sanitary information as may be requested by said Board. And said Board is authorized to require reports and information (at such times and of such facts, and, generally, of such nature and extent as its by-laws or rules may provide) from all public dispensaries, hospitals, asylums, infirmaries, prisons and schools, and from the managers, principals and officers thereof, and from all other

Local boards of health and institutions to report to board.

public institutions, their officers and managers, and from the proprietors, managers, lessees and occupants of all places of public resort in the State; but such reports shall only be required concerning matters or particulars in respect of which it may, in its opinion, need information for the proper discharge of its duties.

Scientific investigations.

Section 9. Said Board may, from time to time, engage suitable persons to render sanitary service or to make or supervise practical and scientific investigations and examinations requiring expert skill, and to prepare plans and reports relative thereto. But no more than two thousand dollars shall be expended in any one year for such special sanitary service.

Annual report.

Section 10. It shall be the duty of said Board, on or before the first Monday of December, in each year, to make a report in writing to the Governor of this State upon the sanitary condition and the prospects of the State, and such report shall set forth the action of the said Board and its officers and agents, and the names thereof, for the past year, and may contain other useful information pertinent to the objects for which it was created, and shall suggest any further legislative action or precaution deemed proper for the better protection of life and health; and the annual report of said Board shall also contain a detailed statement of the (State) Treasurer of all moneys paid out by or on account of said Board, and a detailed statement of the manner of its expenditures during the year last past, but its total expenditures shall not exceed the sum of five thousand dollars in any one year.

So in P. L., probably a mistake of transcriber.

Appropriation.

Section 11. The sum of ten thousand dollars (\$10,000) is hereby appropriated from the Treasury for the purposes of this act and the expenditures properly incurred by the authority of said Board and verified by affidavit, subject, however, to the limitations hereinbefore imposed, and shall be paid by the Treasurer upon the warrant of the Auditor General.

Section 12. This act shall take effect immediately, and all acts or parts of acts inconsistent herewith shall be and are hereby repealed.

Approved June 3, 1885.

ROBERT E. PATTISON.

## BY-LAWS.

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The by-laws of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania are as follows:

### Article I.

#### Officers of the Board.

Section 1. The officers of the Board shall be a President and Secretary as directed by section two of the act establishing the Board.

Section 2. All elections shall be by ballot.

### Article II.

#### Duties of Officers.

Section 1. The President shall preside at the meetings of the Board, preserve order, and perform such other duties as custom and parliamentary usage require. He shall be, ex-officio, a member of all committees.

Section 2. The Secretary shall keep the records and conduct the correspondence of the Board. He shall be custodian of all books, documents, furniture and other property belonging to the Board. He shall give proper and timely notice, in writing, of every regular and called meeting, to each member of the Board, and shall, as executive officer, perform such other duties as are assigned by the act establishing the Board, or by these by-laws, as the Board may from time to time direct. All communications from the Secretary to the Board shall be in writing.

### Article III.

#### Meetings.

Section 1. The regular meetings of the Board shall be held on the second Thursday in May, July and November, at Harrisburg (unless otherwise ordered). At the meeting in July the election of officers shall be held. At the meeting in November the annual report shall be adopted, and at the meeting in May a public address on some sanitary topic shall be delivered.

Section 2. Special meetings shall be called by the President, at

such time and place as he shall designate, whenever requested in writing by three members of the Board, one of whom shall be the Secretary.

Section 3. A majority of the members of the Board shall at any regular, called or adjourned meeting, organize and constitute a quorum for the transaction of business.

## Article IV.

### Order of Business.

Section 1. All meetings of the Board shall be called to order at the appointed hour by the President. In the event of his absence a chairman pro tempore shall be appointed.

Section 2. At regular meetings the business shall be conducted as follows:

1. The Secretary shall register the names of the members present.
2. The minutes of the last regular meeting shall be read.
3. The minutes of special meetings held since the last regular meeting shall be read.
4. Report of the Secretary.
5. Reports of standing committees.
6. Reports of special committees.
7. At the meeting in July, nomination and election of a president for the ensuing year; at the meeting in November, appointment of standing committees.
8. Unfinished business.
9. New business.
10. Adjournment.

Section 3. At special meetings the following shall be the order of business:

1. Registration of names of members present.
2. Reading of minutes, if called for.
3. Presentation of special subject.
4. Presentation of accounts.
5. Adjournment.

## Article V.

### Annual Report of the Secretary.

The Secretary shall, at the meeting in November, make a full report of his official acts during the year ending October 1, preceding, and accompany the same with recommendation of such measures as he shall deem necessary for the preservation of the public health and the faithful execution of the law, and this report shall constitute the basis of the report of the Board to be presented to the Governor on

or before the first Monday of December in each year, in accordance with the requirements of section ten of the act constituting this Board.

## Article VI.

### Standing Committees.

Section 1. The following standing committees shall be appointed by the President of the Board at the meeting in November:

1. An executive committee.
2. A committee on registration and vital statistics.
3. A committee on preventable diseases, disinfection and supervision of travel and traffic.
4. A committee on water supply, drainage, sewerage, topography and mines.
5. A committee on public institutions and school hygiene.
6. A committee on adulterations, poisons, explosives and other special sources of danger to life and limb.
7. A committee on sanitary legislation, rules and regulations.

Section 2. Such papers, communications, or other matter received by the Secretary as he may deem proper for the purpose, he shall forward to the chairman of the appropriate committee, after filing the titles and memoranda, which shall be recorded in the Secretary's office.

Section 3. All reports of committees shall be in writing.

## Article VII.

### Finances.

Section 1. All accounts against the Board shall be filed with the Secretary, and may be presented at any meeting of the Board, when they shall be acted on in open session; and all accounts allowed shall be endorsed "Approved by order of the State Board of Health and Vital Statistics," and shall be endorsed by the President and Secretary.

Section 2. The Secretary shall record in a book reserved for that purpose, all accounts of expenditures ordered or made by the Board and its several members, and shall, before presenting any bill, account or voucher to the Auditor General, cause a copy of the same to be recorded, and shall have stamped upon such voucher, account or bill the audit and date, as the executive committee shall provide.

## Article VIII.

### Executive Committee.

Section 1. The executive committee shall consist of not less than three members, including the Secretary of the Board, who shall be secretary of the committee.

Section 2. It shall have the general supervision of the finances, purchases, expenses and publications of the Board.

Section 3. Its office shall be in the city of Philadelphia until otherwise ordered.

Section 4. It shall hold meetings at least quarterly, and as much oftener as it shall deem necessary, and shall meet on the call of the chairman.

Section 5. With the approval of the Board or of the executive committee, the Secretary shall make a requisition upon the Secretary of Internal Affairs for such stationery, printed forms, clerical labor, apartments and furniture as shall be needed for the use of the Board.

Section 6. No purchases shall be made or expenses incurred except by order of the Board or of the executive committee; and the executive committee shall not have power to incur any indebtedness beyond the amount appropriated by law.

## Article IX.

### Rules of Order.

In conducting the business of the meetings of the Board, the parliamentary rules governing the Legislature of the State of Pennsylvania shall be adopted so far as they are applicable to its deliberations.

## Article X.

### Seal.

The seal of the Board shall be circular in shape, bearing on the circumference the words, "State Board of Health. Pennsylvania. 1885. Salus Populi Suprema Lex," and in the centre the coat of arms of the Commonwealth.

## Article XI.

### Amendments.

These by-laws may be altered or amended at any regular meeting of the Board by a two-third vote of the members present.

## REGULATIONS OF THE BOARD.

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### (R. I.)

#### Regulations in Regard to the Abatement and Removal of Nuisances.

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Whenever a complaint is made in writing to the Secretary of the Board of the existence of a nuisance, he shall forthwith, as executive officer of the Board, investigate the matter and shall determine whether the alleged nuisance is detrimental to the public health, or the cause of any special disease or mortality; and in case he shall so find, then he shall notify the owner, agent or occupier of said premises, in writing, of such finding, and the executive officer shall thereupon order and direct the abatement and removal of the same within ——— days; and in the event of the failure of said owner, agent or occupier of said property to abate and remove the nuisance, then the executive officer may proceed to abate and remove the same, and may employ all the force necessary to do so, and shall proceed by warrant, arrest and indictment, to convict the party failing to obey said order of abatement and removal.

### (R. II.)

Provisional Regulations for Preventing House Yards, Streets, Slaughter Houses, Stock Yards, Hog Pens, Bone-Boiling and Fat-Rendering and Other Similar Establishments from Being or Becoming Prejudicial to the Public Health.

#### Nuisances Defined.

1. Whatever is dangerous to human life or health, and whatever renders soil, air, water or food impure or unwholesome, are declared to be nuisances and to be illegal, and every person having aided in creating or contributing to the same, or who may support, continue or retain any of them, shall be deemed guilty of a violation of these regulations.

#### House Refuse, Garbage, Etc.

2. No house refuse, offal, garbage, dead animals, decaying vegetable matter, or organic waste substances of any kind, shall be thrown upon any street, road, ditch, gutter or public place, and no putrid or

decaying animal or vegetable matter shall be kept in any yard, house, cellar or adjoining out-buildings for more than twenty-four hours.

### Noxious Trades.

3. No person or company shall erect or maintain any manufactory or place of business dangerous to life or detrimental to health, or where unwholesome, offensive or deleterious odors, gas, smoke, deposit or exhalations are generated, within one mile of the limits of any city or borough, without the permit of the board of health of said city or borough, and all such establishments shall be kept clean and wholesome so as not to be offensive or prejudicial to public health, nor shall any offensive or deleterious waste substance, refuse or injurious matter be allowed to accumulate upon the premises or be thrown or be allowed to run into any public waters, stream, water course, street, road or public place. And every person or company conducting such manufacture or business shall use the best approved and all reasonable means to prevent the escape of smoke, gases and odors, and to protect the health and safety of all operatives employed therein.

4. The business of bone and horse boiling shall not be allowed, unless conducted under cover, the building to be provided with smoke consumers, and a due regard to be had to cleanliness in the disposition of the offal. No bone boiling establishment or depository of dead animals shall be kept or erected in any part of this Commonwealth which is not under the jurisdiction of the local board of health, without a permit from the board of health of the nearest city or borough.

5. No permit shall be granted to any person or persons to carry on the business of boiling bones of dead animals until after a careful inspection of the locality, buildings and apparatus, and of the plans for conducting the business, by an accredited inspector of the State Board of Health, or, if such inspector be not accessible, then by an inspector appointed for the purpose by the board of health of the nearest city or borough.

6. No bone-boiling establishments or depositories of dead animals shall be kept or erected in or near a thickly inhabited neighborhood.

7. The floors of all bone-boiling establishments and depositories of dead animals shall be paved with asphalt or with brick or stone, well laid in cement, or with some other impervious material, and shall be well drained. All such establishments shall have such an adequate water supply as will enable thorough cleanliness to be maintained.

8. The boiling of bones and dead animals, etc., shall be conducted in steam tight kettles, boilers or caldrons, from which the foul



vapors shall first be conducted through scrubbers or condensers, and then into the back part of the ash pit of the furnace fire, to be consumed, or by other apparatus equally efficient in preventing or counteracting the offensive effluvia.

9. When bones are being dried after boiling, they shall be placed in a close chamber, through which shall be passed, by means of pipes, large volumes of fresh air, the outlet pipe terminating in the fire-pit.

10. All proprietors of bone-boiling establishments not having, on the 1st day of July, 1886, permits to carry on the business, and violating these regulations, shall be liable to prosecution for failing to obey this order and also to an indictment at common law for creating and maintaining a nuisance.

11. The permit clerk of each local board of health shall have provided a book in which to enter the names of all persons engaged in the business of boiling bones and having depositories of dead animals; also, the location of works and appliances as reported by the inspector, whether licensed or not, the number and date of permit, and remarks.

12. No person or persons, without the consent of the board of health of the nearest city or borough, shall build or use any slaughter house within the limits of this Commonwealth; and the keeping and slaughtering of all cattle, sheep and swine, and the preparation and keeping of all meats, fish, birds or other animal food, shall be in the manner best adapted to secure and continue their wholesomeness as food; and every butcher or other person owning, leasing or occupying any place, room or building wherein any cattle, sheep or swine have been or are killed or dressed, and every person being the owner, lessee or occupant of any room or stable wherein any animals are kept, or of any market, public or private, shall cause such place, room or building, stable or market to be thoroughly cleaned and purified, and all offal, blood, fat, garbage, refuse and unwholesome and offensive matter to be removed therefrom at least once in every twenty-four hours after the use thereof for any of the purposes herein referred to, and shall also at all times keep all wood-work, save floors and counters, in any building, place or premises aforesaid, thoroughly painted or whitewashed; and the floors of such building, place or premises shall be so constructed as to prevent blood or foul liquids or washings from settling in the earth beneath.

13. No blood-pit, dung-pit, offal-pit or privy well shall remain or be constructed within any slaughter house. Any one offending against this rule shall be guilty of creating and maintaining a nuisance prejudicial to the public health, and shall be required to remove the nuisance within ten days from the date of notice.

14. The owners, agents, or occupiers of all slaughter houses are required, during the months of June, July, August and September,

to distribute twice in each week not less than twenty-five pounds of chloride of lime about the premises, and also to remove the contents of any manure-pit or manure pile on the premises once in each week, the said premises and contents of manure-pits being hereby declared to be nuisances prejudicial to the public health, unless subject to frequent disinfection and cleaning as herein indicated.

15. All constables and supervisors are enjoined, and all citizens are respectfully desired, to give information to the State Board of Health of any violation of the health laws, or of the regulations of the board, so that the sanitary measures adopted by the latter to ensure the health of the people may be fully carried out, and all offenders promptly punished.

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Note.—Section six of the act of June 3, 1885, confers upon the State Board of Health power and authority to order nuisances to be abated and removed in cities, boroughs, districts and places having no local board of health. Any person violating or failing to obey such order becomes liable, on conviction, to a fine of one hundred dollars.

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(R. III.)

Regulations in Regard to the Sanitary Supervision of Travel and Traffic.

Upon satisfactory information of the approach to, or transit through the Commonwealth of Pennsylvania, of infected persons or goods, it shall be the duty of the secretary, as executive officer of the board, to cause the same to be stopped at the State line, or, if found within the limits of the State, to cause such persons or goods to be removed from cars, stages, vessels, boats or other conveyances, and securely isolated and disinfected; and he may, if, in his judgment, the emergency is such as to demand it, call a meeting of the committee on travel and traffic, to which his action shall be submitted, with his reasons therefor, in writing. But, in cases coming under the jurisdiction of national or municipal quarantine authorities, he shall co-operate with said authorities in all such action.

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(R. IV.)

Regulations in Regard to Disinterment and Transportation of Dead Bodies.

Disinterment of Bodies.

Rule I. The removal of any body from its place of original interment is declared to be a nuisance dangerous to the public health, and

is prohibited unless the same be done under the direction, and by permission of the State or local board of health.

Rule II. The above rule applies as well to the removal of a body from one grave or vault to another in the same cemetery as to its removal to another burial ground or place.

Rule III. The removal of dead bodies from any burial ground situated within the built-up portion of any city or borough is forbidden between April 1 and October 15.

Rule IV. The disinterment of the body of any person who died of any contagious or infectious disease is strictly prohibited, unless by special authority, and upon such conditions as the State or local board of health may impose.

Rule V. The disinterment of bodies of persons who have died of Asiatic cholera, yellow fever, epidemic cerebro-spinal meningitis or spotted fever, small-pox or varioloid, bubonic plague, relapsing fever, typhus or ship fever, or scarlet fever, is prohibited, except by special permission of the State or local board of health; provided, however, that no such permit shall be granted within ten years after the interment of such person.

Rule VI. When a body dead of any of the diseases mentioned in the preceding rule is to be disinterred the following precautions shall be strictly observed: (a) No one shall be present at the disinterment but those necessary to perform the labor and one male relative of the deceased. (b) A hermetically sealed zinc-lined box sufficiently large to contain the box, coffin or casket already in the grave shall be in readiness to receive the latter. (c) When within six inches of the top of the receptacle containing the body, the earth shall be saturated with one-fifth per cent. solution (1-500) of the bichloride of mercury. (d) The receptacle containing the remains shall on no account be opened, but shall be at once placed in the box provided as above and hermetically sealed, and said box shall not be opened on arriving at the place of destination.

### Transportation of Bodies.

Rule 1. The transportation of bodies dead of small-pox, Asiatic cholera, yellow fever, typhus fever or Bubonic plague is absolutely forbidden.

Rule 2. The bodies of those who have died of diphtheria (membranous croup), scarlet fever (scarlatina, scarlet rash), glanders, anthrax or leprosy, shall not be accepted for transportation unless prepared for shipment by being thoroughly disinfected by (a) arterial and cavity injection with a proved disinfectant fluid; (b) disinfecting and stopping all orifices with absorbent cotton or jute (the latter preferred), and (c) washing the body with disinfectant, or wrapping

it in a sheet saturated with a strong solution of bichloride of mercury. After being disinfected as above, such body shall be enveloped in a layer of cotton not less than one inch thick, completely wrapped in a sheet and bandaged, and encased in an air-tight zinc, tin, copper or lead lined coffin or iron casket, all joints and seams hermetically soldered, and all enclosed in a strong, tight wooden box. Or, the body being prepared for shipment by disinfecting and wrapping as above, may be placed in a strong coffin or casket, and said coffin or casket encased in an air-tight zinc, copper or tin case, all joints and seams hermetically soldered, and all enclosed in a strong outside wooden box.

Rule 3. The bodies of those dead from typhoid fever, puerperal fever, erysipelas, tuberculosis, measles, or other dangerous communicable diseases, not specified in Rules 1 and 2, may be received for transportation when prepared for shipment by filling cavities with an approved disinfectant, washing the exterior of the body with the same, stopping all orifices with absorbent cotton or jute, and enveloping the entire body with a layer of cotton not less than one inch thick, and all wrapped in a sheet and bandaged and encased in an air-tight coffin or casket, provided that this shall apply only to bodies that can reach their destination within forty-eight hours from the time of death. In all other cases such bodies shall be prepared for transportation in conformity with Rule 2.

Rule 4. The bodies of those dead from diseases that are not contagious or communicable may be received for transportation when encased in a sound coffin or casket and enclosed in a strong outside wooden box, provided they reach their destination within thirty hours from time of death. If the body cannot reach its destination within thirty hours from time of death it must be prepared for shipment by filling the cavities with an approved disinfectant, washing the exterior of the body with the same, stopping all orifices with absorbent cotton or jute, and enveloping the entire body with a layer of cotton not less than one inch thick, and all wrapped in a bandage, or antiseptic cotton blanket, and encased in an air-tight coffin or casket.

Rule 5. In case of contagious, infectious or communicable diseases the body must not be accompanied by persons or articles which have been exposed to the infection of the deceased, unless certified by the health officer as having been properly disinfected; and before selling passage tickets agents shall carefully examine the transit permit and note the name of the passenger in charge, and of any others proposing to accompany the body, and see that all necessary precautions have been taken to prevent the spread of the disease. The transit permit in such cases shall specifically state who is authorized by the health authorities to accompany the remains. In all cases

where bodies are forwarded under Rule 2, notice must be sent by telegraph to the health officer at destination, advising the date and train on which the body may be expected. This notice must be sent by or in the name of the officer at the initial point, and to enable the health officer at destination to take all necessary precautions at that point.

Rule 6. Every dead body must be accompanied by a person in charge who must be provided with a passage ticket and also present a full first class ticket marked 'corpse' for the transportation of the body, and a transit permit showing the physician's or coroner's certificate, name of deceased, date and hour of death, age, place of death, cause of death, and, if of a contagious, infectious or communicable nature, the point to which the body is to be shipped, and when death is caused by any of the diseases specified in Rule No. 2, the name of those authorized by the health authorities to accompany the body. The transit permit must be made in duplicate, and the signatures of the physician or coroner, health officer and undertaker must be on the original and duplicate copies. The undertaker's certificate and paster of the original shall be detached from the transit permit and pasted on the coffin box. The physician's certificate and transit permit shall be handed to the passenger. The whole duplicate copy shall be sent to the official in charge of the baggage department of the initial line, and by him to the Secretary of the State, or Provincial Board of Health of the state or province from which said shipment was made.

Rule 7. When the dead bodies are shipped by express the whole original transit permit shall be placed upon the outside of the box and the duplicate forwarded by the express agent to the express agent and Secretary of the State or Provincial Board of Health of the state or province from which said shipment was made.

Rule 8. Every disinterred body, dead from any disease or cause, shall be treated as infectious or dangerous to the public health, and must not be accepted for transportation unless said removal has been approved by the State or Provincial Health authorities having jurisdiction where such body is to be disinterred, and the consent of the health authorities of the locality to which the body is consigned has first been obtained; and all such disinterred remains must be enclosed in a hermetically sealed (soldered) zinc, tin or copper lined coffin or box.

Bodies deposited in receiving vaults will be treated and considered the same as buried bodies.

(R. V.)

**Regulation in Regard to the Inter-State Notification of the Existence  
of Infectious and Contagious Diseases.**

The following are the resolutions adopted by the International Conference of Boards of Health, at Toronto, October 6, 1886, with slight verbal modifications:

Whereas, It is necessary for the protection and preservation of the public health that prompt information should be given of the existence of cholera, yellow fever or small-pox; be it resolved—

1. That it is the sense of the National Conference of State Boards of Health, that it is the duty of each state and provincial board of health within whose jurisdiction any of said diseases may occur to furnish immediate information of the existence of such diseases to boards of health of neighboring states and provinces, and to local boards of such states as have no central board, in which the duty of notification shall lie upon the local boards.

2. That upon the prevalence of rumor of the existence of pestilential disease in any State or province, if positive definite information thereon be not obtainable from the proper health authorities, this conference holds that the health officials of another state are justified in entering the before-mentioned state or province for the purpose of investigating and establishing the truth or falsity of such reports.

3. That whenever practicable, the investigations undertaken under the preceding section shall be made with the co-operation of the state or local health authorities.

4. That any case which presents symptoms leading to serious suspicion of the existence of one of the aforesaid diseases shall be treated as suspicious, and reported as provided for in cases in which the diagnosis is certain.

5. That any case respecting which reputable and experienced physicians disagree as to whether the disease is or is not pestilential, shall be reported as suspicious.

6. That any suspected case respecting which efforts are made to conceal its existence, full history and true nature, shall be deemed suspicious and so reported.

7. That in accordance with the provisions of the foregoing resolutions, the boards of health of the United States and Canada represented at this conference, do pledge themselves to an interchange of information as herein provided.

Addendum to regulation in regard to the inter-state notification of contagious and infectious diseases, adopted by the National Conference of State Boards of Health at Washington, September 8, 1887, and by the State Board of Health of Pennsylvania, November 9, 1887.

1. All communicable diseases hereinafter mentioned, prevalent in



certain areas, or which tend to spread along certain lines of travel shall be reported to all state and provincial boards of health within said areas or along said lines of communication.

2. In the instance of small-pox, cholera, yellow fever and typhus, reports shall be at once forwarded, either by mail or telegraph, as the urgency of the case may demand.

3. In the instance of diphtheria, scarlet fever, typhoid fever, anthrax or glanders, weekly reports, when possible, shall be supplied in which shall be indicated as far as known the places implicated and the degree of prevalence.

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(R. VI.)

**Regulation for the Better Preservation of the Public Health, and to Limit the Progress of Epidemic (Contagious and Infectious) Diseases.**

In virtue of the powers conferred by the act of Assembly, of June 3, 1885, section five and six, P. L. 56 of the Laws of the Commonwealth of Pennsylvania, be it ordered by the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, and it is hereby ordered by the authority of the same:

Section 1. That whatever is dangerous to human life or health, whatever renders the air or food or water or other drink unwholesome, and whatever building, erection or part of cellar thereof is overcrowded, or not provided with adequate means of ingress and egress or is not sufficiently supported, ventilated, sewered, drained, cleaned or lighted, are declared to be nuisances, and to be illegal; and every person having aided in creating or contributing to the same, or who may support, continue or retain any of them shall be deemed guilty of a violation of this regulation, and shall be liable to a penalty of not more than one hundred dollars. Nuisances defined.

Sec. 2. No house refuse, offal, garbage, dead animals, decaying vegetable matter or organic waste substance of any kind shall be thrown on any street, road, ditch, gutter or public place, and no putrid or decaying animal or vegetable matter shall be kept in any yard, house, cellar or adjoining out building or grounds for more than twenty-four hours. House refuse, garbage, etc., not to be exposed.

Pig pens to be properly constructed and kept clean.

Sec. 3. No pig pen shall be built or maintained within one hundred feet of any well or spring of water used for drinking purposes, or within thirty feet of any street or any inhabited house, or unless constructed in the following manner, viz: So that the floor or floors of the same shall be not less than two feet from the ground, in order that the filth accumulating under the same may be easily removed.

Privies not to remain near wells of drinking water.

Sec. 4. No privy vault, cess-pool, or reservoir into which a privy, water closet, cess-pool, stable or sink is drained, unless it is water tight, shall be constructed, dug or permitted to remain within one hundred and fifty feet of any well, spring or other source of water used for drinking or culinary purposes; unless the surface of such vault, cess-pool or reservoir is at a lower level than the bottom of such well. Earth privies and earth closets, with no vault, pit or depression below the surface of the ground, shall be excepted from this regulation, but sufficiently dry earth or coal ashes must be used to absorb all the fluid part of the deposit.

Sec. 5. All sewer drains shall be water tight.

Sewer-drains not to contaminate water supply.

Sec. 6. No sewer drain shall empty into any lake, pond, dam, reservoir, or other collection of water used for drinking purposes, or into any standing water.

Sec. 7. All pipes connecting a water closet with a soil pipe shall be trapped, each separately. All waste pipes shall be trapped, each separately, and close to the connections with each bath, sink, bowl or other fixture, unless adequate provision is made for downward ventilation through said water pipes, in which case one trap may serve for several fixtures.

Sec. 8. All soil pipes shall be carried at their full size through the roof and left open. A provision shall also be made for admitting air to the house drain side of the main trap, if such trap exists.

Sec. 9. The joints in vitrified pipes shall be carefully cemented under and around the pipe, and the joints in cast iron pipes shall be run and calked with lead.

Sec. 10. All changes in direction shall be made with curved pipes. All joints and pipes shall be made airtight.

Diseases dangerous to public health enumerated.

Sec. 11. The following named diseases are declared to be communicable and dangerous to the public health, viz: Small-pox (variola, varioloid), cholera (Asiatic or epidemic), scarlet fever (scarlatina, scarlet



rash), measles, diphtheria (diphtheritic croup, diphtheritic sore throat), typhoid fever, typhus fever, yellow fever, spotted fever (cerebro-spinal meningitis), relapsing fever, epidemic dysentery, hydrophobia, (rabies), glanders (farcy), tuberculosis (consumption), bubonic plague and leprosy, and shall be understood to be included in the following regulations, unless certain of them only are specified.

Sec. 12. Whenever any householder knows that any person within his family or household has a communicable disease, dangerous to the public health, he shall immediately report the same to the school board, giving the street and number, or location of the house.

Householders required to report.

Sec. 13. Whenever any physician finds any person whom he is called upon to visit has a communicable disease, dangerous to the public health, he or she shall immediately report the same to the school board giving the street and number or location of the house, on the receipt of which report the said board shall immediately notify the teacher or principal of every school in the district, instructing said teachers or principals to dispense with the attendance of all pupils residing in the family in which such disease exists. No physician who may, in good faith in obedience to this regulation, report a case as one of communicable diseases which subsequently proves not to be such, shall be liable to a suit for damages for such error in reporting. It shall be the duty of such physician and of all other attendants upon persons affected with such diseases to avoid exposure to the public of any garments or clothing about their own persons that may have been subjected to the risk of infection.

Physicians required to report.

School teachers to be notified.

Physicians not to be sued for mistakes in obeying this regulation.

Sec. 14. No person shall, unless by permit of a board of health, carry or remove from one building to another any patient affected with any communicable disease, dangerous to the public health. Nor shall any person, by any exposure of any individual so affected, or of the body of such individual, or of any article capable of conveying contagion or infection, or by any negligent act connected with the case or custody thereof, or by a needless exposure of himself or herself, cause or contribute to the spread of disease from any such individual or dead body.

Exposure of infected persons or things forbidden.

Sec. 15. There shall not be a public or church funeral of any person who has died of Asiatic cholera, small-

Funeral after infectious diseases forbidden.

Public notice of cause of death required.

Public conveyances not to be infected.

Infected conveyances not to be used until disinfected.

Infected houses or rooms not to be let.

Isolation of families required.

Disinfection required.

Infected animals to be excluded.

pox, typhus fever, diphtheria, yellow fever, scarlet fever or measles, and the family of the deceased shall in all such cases limit the attendance to as few as possible, and take all precautions possible to prevent the exposure of other persons to contagion or infection; and the person authorizing the public notice of death of such person shall have the name of the disease which caused the death appear in such public notice.

Sec. 16. No person suffering from or having very recently recovered from small-pox, scarlet fever, diphtheria, yellow fever or measles shall expose himself, nor shall any one expose a person under his charge in a similar condition, in any public conveyance, without having previously notified the owner or person in charge of such conveyance of the fact of such condition as above stated. And the owner or person in charge of such conveyance must not, after the entry of any person so infected into his conveyance, allow any other person to enter it without having sufficiently disinfected it.

Sec. 17. No person shall let or hire any house or room in a house in which a communicable disease, dangerous to the public health, has recently existed, until the room or house and premises therewith connected have been disinfected and for the purpose of this section, the keeper of a hotel, inn or other house for the reception of lodgers, shall be deemed to let or hire part of a house to any person admitted as a guest into such hotel, inn or house.

Sec. 18. Members of any household in which small-pox, diphtheria, scarlet fever or measles exist shall abstain from attending places of public amusement, worship or education, and, as far as possible, from visiting other private houses.

Sec. 19. The clothing, bed-clothing and bedding of persons who have been sick with any communicable disease, dangerous to the public health, and the rooms which they have occupied during such sickness, together with their furniture, shall be disinfected as directed in the circulars of this Board.

Sec. 20. No animal affected with a communicable disease, dangerous to the public health, shall be brought within the limits of this Commonwealth, and the bodies of such animals dead of such disease or killed on account thereof, shall be buried with quick-

lime under four feet of earth or burned, but shall not be buried within five hundred feet of any residence, or of any source of water supply.

Sec. 21. No milk which has been watered, adulterated, reduced or changed in any respect from its natural condition by the addition of any foreign substance, shall be held, kept or offered for sale.

Milk not to be adulterated.

Sec. 22. No meat, fish, birds, fowls, fruit, vegetables, milk, and nothing for human food, not being then healthy, fresh, sound, wholesome, fit and safe for such use, nor, any animal or fish that died by disease, and no carcass of any calf, pig or lamb, which at the time of its death was less than three weeks old, and no meat therefrom shall be brought within the limits of this Commonwealth or offered or held for sale as food.

No unwholesome food to be sold.

Sec. 23. It shall be the duty of the occupant of every house, in the month of May, in each and every year, to clean the cellars thereof of all dirt, vegetables and other impure matter calculated to engender disease, and to cause them to be thoroughly whitewashed with fresh lime.

Cellars to be cleaned.

Sec. 24.. No pupil shall be allowed to attend the public schools in this Commonwealth who has not been vaccinated successfully within seven years.

Vaccination of school children required.

Sec. 25. No parent, guardian or master, in whose house or family there shall have been a communicable disease, dangerous to the public health, shall permit any child residing in said house or family to attend any public, private or Sunday school, after the cessation of said disease, within a period of ten days after the house shall have been thoroughly disinfected and cleaned. And it shall be the duty of school boards to have this section printed on cards, mentioning the names of diseases declared communicable and dangerous to the public health in section thirty-one of this regulation, and posted in every school room, and it shall be the duty of each teacher to read the section to the school at least once a month and whenever any epidemic shall appear.

Period of isolation established for school children.

Children to be instructed in regard to danger of infection.

Sec. 26. Every person who acts as a sexton or undertaker, or cemetery keeper, or has the charge of any tomb, vault, burying ground or other place for the reception of the dead, or where the bodies of any human beings are deposited, shall so conduct his business and so care for any such place above named, as to

Sextons, cemetery keepers, etc.

avoid detriment or danger to public health; and every person undertaking preparations for the burial of a body dead from communicable diseases as hereinbefore enumerated, shall adopt the precautions prescribed in regulations IV of this Board. No dead body shall be exhumed and removed between the months of May and October inclusive and nobody dead from any contagious or infectious disease shall be exhumed and removed unless by special authority and upon such conditions as the State Board of Health may impose.

Penalties to be  
inflicted.

Sec. 27. Every person violating any section of this regulation is liable for every such offense, upon conviction before any court, to a fine of not more than one hundred dollars, at the discretion of the court.

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(R. VII.)

Regulation for the Prevention of Blindness.

Whenever, in any city, borough, village or place in this State having no health authority of its own, any nurse, midwife or other person, not a legally qualified practitioner of medicine, shall notice inflammation of the eyes or redness of the lids in a new-born child under his or her care, it shall be the duty of such person to report the same to some legally qualified practitioner of medicine, within twelve hours of the time the disease is first noticed.

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(R. VIII.)

Regulation for the Enforcement of Domiciliary Quarantine and  
Closure of Schools.

Whenever the Secretary shall have satisfactory information that any of the following diseases, viz: Small-pox, varioloid, scarlet fever, diphtheria, yellow fever, typhus fever or Asiatic cholera is epidemic, or threatens to become epidemic in any city, borough, district or place having no local board of health, or in which the sanitary laws or regulations are inoperative, he shall have authority, as executive officer of the Board, to issue a proclamation in the name of the Board declaring such disease epidemic, and to order and enforce such measures in the way of quarantine, isolation of the sick, vacci-

nation, disinfection and the closure of schools, public and private, religious and secular, as in his judgment may be necessary to stamp out the infection.

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(R. IX.)

Regulation Authorizing the Secretary to Place, or Cause to be Placed, Placards Upon Houses in Which Certain Communicable Diseases Exist.

Section 1. Whenever the Secretary shall have satisfactory information that any of the following diseases: cholera, small-pox (variola or varioloid), scarlet fever (scarlatina), typhus fever, yellow fever, relapsing fever, diphtheria (diphtheritic croup) membranous croup or leprosy exist in any city, borough, district or place having no local board of health, or in which the sanitary laws or regulations are inoperative, he shall have authority to place or cause to be placed, in a conspicuous place or places upon or near the house or premises in which said case may be located a placard or placards upon which shall be printed in large letters the name of the disease from which the person or persons in said house or premises may be suffering, as aforesaid, as the case may be: Provided, That variola or varioloid shall be placarded as small-pox, and that diphtheritic croup and membranous croup shall be placarded as diphtheria, and that scarlatina shall be placarded as scarlet fever, and said placard or placards shall remain thereon until such time as the rules and regulations established by this Board regarding the destruction or disinfection of infected bedding, clothing or other articles which have been exposed to infection, and the disinfection of houses and premises have been fully complied with: Provided, That in addition to the placarding aforesaid, or in lieu of the same, the Secretary may place or cause to be placed a guard or guards upon said house or premises.

Sec. 2. The head of the family occupying any house or premises upon or near which said placard or placards aforesaid may be placed, shall, upon conviction before any mayor, burgess, alderman, police magistrate or justice of the peace of the city, borough or township in which said offense was committed be liable for the fine or penalty provided by the act of Assembly of June 18, 1895, in any case where such placard or placards are removed, disturbed, covered up, taken down or destroyed with his or her knowledge or consent before the time provided by section one of this regulation; said fine to be not less than five nor more than one hundred dollars, in default of pay-

ment whereof such person or persons so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days.

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(R. X.)

**Regulation Requiring Burials to be at a Certain Depth Below the Surface of the Ground.**

Section 1. The burial of a body at an insufficient depth below the surface of the ground is hereby declared to be a nuisance prejudicial to the public health.

Section 2. In all cities, boroughs, districts and places having no local board of health, no body shall be buried at a less depth than six feet below the surface of the ground in populous districts, or less than four feet below the surface of the ground in rural districts.

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(R. XI.)

**Regulation for the Disinfection of the Persons, Excreta, Effects and Dwellings of those Sick with Communicable (Contagious and Infectious) Diseases.**

**To Disinfect in the Sick-room.**

1. All glasses, cups or other vessels used by the patient shall be cleansed in boiling water before being used by others. And all foods and drinks touched and not consumed by the sick shall be burned or buried.

2. The discharge from the bowels and from the kidneys shall be received on their very issue from the body into vessels charged with disinfectants, and, after thorough disinfection, emptied into a closet connecting with a sewer or, in the country, buried at least one hundred feet from any well or running stream. In no case shall they be thrown on the surface of the ground or into a running stream of water. Rags and paper which have become contaminated with any discharge shall be burned at once in a strong fire. It is well, in all contagious diseases, to place a piece of rubber cloth under the patient to prevent the discharges from soaking into the bed.

3. All articles of the patient's clothing, all sheets, towels, napkins, bandages or sponges used about the sick, must, before being taken from the sick room, be thrown into a tub containing several gallons

of solution of chloride of lime (standard solution No. 1), and remain in it three hours. Never carry any dry clothes from the sick room without disinfection. After disinfection they must be thoroughly boiled.

5. After death the body must at once be wrapped in a sheet saturated with a solution of corrosive sublimate (standard solution No. 2) and buried as soon as possible.

6. Burn as many of the articles which have been about the sick as possible.

#### 7. Standard Disinfecting Solutions Recommended by the State Board of Health.

1. Standard Solution No. 1.—Dissolve chloride of lime or bleaching powder of the best quality (containing at least twenty-five per cent. of available chlorine) in soft water in the proportion of four ounces (a quarter of a pint) to the gallon.

\*2. Standard Solution No. 2.—Dissolve corrosive sublimate and permanganate of potash in soft water in the proportion of two drachms (a heaping teaspoonful) of each to the gallon.

3. Standard Solution No. 3.—To one part of hypochlorite of soda add five parts of soft water.

4. Standard Solution No. 4.—Dissolve corrosive sublimate in water in the proportion of four ounces to the gallon. One fluid ounce (two tablespoonsful) of this solution to the gallon of water is sufficiently strong. Articles should be left in it for two hours. One gallon of standard solution No. 1, may also be mixed with nine gallons of water, and used in the same way. No article should be allowed to leave the infected room until it has been either disinfected or boiled.

#### 8. To Disinfect Discharges from the Patient.

Use standard solutions, Nos. 1, 2 or 3, keeping a pint of the solution used constantly in the vessel ready for any emergency. Let the discharge be passed directly into the solution, then let a pint more of it be added, and let the whole stand sometime to be thoroughly acted upon before being thrown into the sewer or being buried. Ordinary whitewash, freshly made or preserved by pouring a thin film of coal oil on its surface, is also very useful for this purpose. These discharges should never be thrown into a privy or cess-pool, nor into a running stream, nor on the surface of the ground.

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\*Note.—This solution is highly poisonous. 2. It requires a contact of one hour to be efficient. 3. It destroys lead pipes. 4. It is without odor.

Corrosive sublimate solution should be kept in wooden or crockery vessels.



**9. To Disinfect Clothing, Towels, Napkins, Bedding and Such Textile Fabrics as can be Washed.**

Burn as much as possible. Use standard solution No. 4, one ounce to the gallon of water, or use one gallon of solution No. 1 in nine gallons of water. Let the goods soak in the solution for at least three hours before they leave the room. Stir them up so that the solution may get all through the goods. After disinfection boil the goods thoroughly.

**10. To Disinfect Water Closets, Urinals, Sinks and Cess-Pools.**

**5. Carbolic Acid Solution.**—Mix one pint of carbolic acid with two and a half gallons of water.

Standard Solution No. 4, diluted with three parts of water, may also be used in the proportion of one gallon (of the solution) to every four (estimated) of the contents of the vault. Standard solution No. 1 would require to be used gallon for gallon of the material to be disinfected. Dry chloride of lime may be sprinkled over the contents of a privy, or standard solution No. 2 may be made up by the barrel, and four or five gallons be applied during an epidemic.

**To Disinfect the Room after Death or Recovery.**

The room must be vacated. The paper should be carefully scraped from the walls. Thorough ventilation for several days, and thorough washings of all surfaces with one of the disinfecting solutions, say, one pint of standard solution No. 4 to four gallons of water, or a quarter of a pint of solution of hypochlorite of soda to a gallon of water must be effected. The walls and ceiling, if plastered, should be washed with this solution and then whitewashed. All dust must be carefully washed (not brushed or swept) away from ledges, cracks, corners and crevices.

**Sulphur Fumigation.**

To use this effectively, two pounds of sulphur should be burned in a room ten feet square. Every opening in the room—flues, doors, windows, cracks and crevices—must be closed, except the door by which the disinfector is to escape; closet doors and bureau drawers should be opened wide, and all woolen articles which have been in the room during the sickness hung on lines, being spread out and opened up as much as possible. The sulphur is to be burned in an iron kettle or other vessel set in a tub containing a little water to guard against fire. A small quantity of water should be evaporated at the same time. A little alcohol or kerosene must be poured upon the sulphur by means of which it may be ignited. Leave the room quickly, for the fumes are highly poisonous when breathed, and close



the door tightly. Let the room remain closed twenty-four hours or more. Then air thoroughly for at least twenty hours.

### Formaldehyde (Formalin).

This comparatively new substance promises to supersede sulphur as an aerial or gaseous disinfectant. Not only does it appear to be more penetrating and more destructive to germ life, but it possesses the very great advantage of not injuring the colors of fabrics, or wall papers, or tarnishing and corroding metallic surfaces. It is also known as Formic Aldehyde, and is a gas developed by the action of a red hot surface of platinum on the vapor of wood alcohol, or wood spirit (methyl-alcohol). A saturated (40 per cent.) solution of this gas in water is sold under the name of Formalin, Formol or Formalose.

The gas may be generated directly in the apartment to be disinfected, the same precautions being taken as regards stopping up crevices as in using sulphur fumes. Formalin may be mixed with water in the proportion of two parts to the hundred, and applied with a sprayer directly to surfaces to be treated, or may be forced undiluted into the closed apartments through a key-hole or other orifice, in the form of vapor or atomized fluid. A special apparatus known as a generator or regenerator is needed for this purpose.

Another mode of application is to dilute Formalin with an equal quantity of water, and evaporate it in wide pans by gentle heat. For every 1,000 cubic feet of air space, a pint of this mixture is required, or it may be evaporated from sheets moistened with a mixture of one part of Formalin to two of water and hung up in the room. For this method, three pints of the mixture should be evaporated for every 1,000 cubic feet of air space. The temperature of the room should not be allowed to fall below 60 degrees F.

There is testimony of convincing character both from scientific experiments and practical health officers as to the efficiency of all these modes of application.

After the disinfection of apartments by Formaldehyde gas, the latter should be neutralized by ammonia gas, evolved from water of ammonia by heat, or by evaporation from water of ammonia sprinkled upon the floor. The quantity of water of ammonia required for neutralization, after the above-named method, is as follows: 1.26 quarts of water of ammonia for each quart of Formaldehyde.

## (R. XII.)

**Regulation for the Control and Management of Piggeries in the State of Pennsylvania.**

1. This Board declares the keeping of pigs an offensive industry.
2. Hog yards and piggeries will not be permitted within 200 feet of any natural stream or water course, and the drainage of a piggery shall in no case be permitted to reach any natural stream until said drainage has been purified.
3. All pig pens shall be constructed with water-tight floors, either of plank or cement, which must be elevated at least ten inches above the ground.
4. The feeding of animals dead from natural causes to pigs will not be allowed. Offal should not be fed to pigs for at least a month before they are killed. The animals to be killed should be removed from the pen where offal is fed and should be fattened on grain. Offal from hogs should not be fed to hogs, as disease is liable to be communicated to sound animals in this way. Offal from hogs must be burned or buried.
5. All pig pens must be daily cleansed and thus kept free from all offensive odors.
6. Where offal from slaughter houses is fed to pigs, the yards should be cleaned at least twice each week, the refuse being buried or burned.
7. Where garbage or offal is fed to pigs, the troughs, basins or boxes should be cleansed and dried as often as is necessary to prevent unwholesome odors from arising.
8. No hog ranch or piggery for garbage or offal feeding, where more than fifty head of swine are kept, shall be established or maintained without a permit from a health authority.

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**(R. XIII.)****Regulation for Preventing the Pollution of Streams and Other Public Waters by the Refuse and Sewage from Tanneries.**

1. The throwing or otherwise depositing of hair, lime, fleshings, trimmings, spent tan bark and all other solid waste from tanneries in streams, ponds, lakes or other public waters, is absolutely prohibited as entirely unnecessary, and because, under certain conditions, it becomes injurious to the public health.
2. All sewage produced by washing hides in any and all processes, as well as all spent tan liquors, shall, before being run into streams

or other waters used as public water supplies, be filtered through beds of gravel. This can readily be accomplished by setting the works a short distance back from the water.

3. In cases where sulphuric acid, chromic acid, or other acids or salts injurious to human health are employed in tanneries, they shall be recovered, or neutralized before being thrown into any stream used as a public water supply.

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(R. XIV.)

**Regulation Forbidding the Dumping of Night-Soil in Public Waters.**

The dumping of night-soil in any river, stream, lake, pond or other public water in this Commonwealth constitutes a nuisance prejudicial to the public health and is hereby forbidden.

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(R. XV.)

**Regulation with Regard to the Depositing of Night-Soil.**

1. The depositing of night-soil on the surface of the ground is hereby declared to be a nuisance prejudicial to the public health.

2. This material must be placed in pits or trenches dug for the purpose and each deposit covered with fresh earth and lime.

3. When the contents of such pit or trench have reached within one foot of the surface they must be covered with fresh earth and lime, up to the level of the ground.

4. The contents of such pit or trench must then not be disturbed for six months, at the end of which time they will be fit to use as a fertilizer.

5. Any person violating or failing to obey this regulation will be liable to a fine of one hundred (\$100) dollars.

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(R. XVI.)

**Regulation to Prevent the Pollution of the Waters of the Schuylkill River and its Tributaries.**

1. No privy, urinal or other construction of easement, shall be placed or allowed to remain over the waters of or directly upon the banks of the Schuylkill river, the canals of the Schuylkill Navigation Company, or any tributaries of said river or canals above Fairmount Dam.

2. No person shall either directly or indirectly, or by dumping from a cart or other conveyance or receptacle, deposit human excrement in or on the banks of said waters.

3. No privy vault, cess-pool or reservoir into which a privy, water closet or cess-pool is drained, shall be constructed, dug or permitted to remain within one hundred and fifty feet of the banks of said waters unless the same is thoroughly cemented so that it shall be water tight.

4. No boat, either for public or private use, whether steam boat, canal boat, house boat, ferry boat, bath house or other construction used to float, steam or sail upon said water, shall have kept or maintained thereon a water closet, urinal or other construction of easement which shall permit excrement to empty in said waters. All boats carrying passengers or crews shall be provided with watertight tanks or receptacles which shall be kept in a sanitary condition satisfactory to the State Board of Health and to the boards of health of cities and boroughs through which said boats may pass, and the contents thereof shall be disposed of at least one hundred and fifty feet from high water mark of the shores of said river and its tributaries.

5. No excrement shall be deposited either directly or indirectly upon the ice of said waters.

## APPENDIX M.

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### CIRCULARS AND FORMS.

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1. Circular No. 8. (Revised, 5th edition). Precaution Against Small-pox..
2. Circular No. 10. (Revised). Model Regulations for Boards of Health.
3. Circular No. 14. Model Rules for Boards of Health.
4. Circular No. 52. Hygienic Hints for Barbers and Hair Dressers.
5. Circular No. 53. Precautions against the Plague.
6. Circular No. 54. Model Regulations for School Boards acting as Boards of Health.
7. Form 15. (Revised). Certificate of Death.
8. Form 17. (Revised). Report of Communicable Disease.
9. Form 25. (Revised). Report of Inspection.
10. Form 41. Certificate of Health.
11. Form 42. Report of Contagious Disease (postal card).

## CIRCULAR NO. 8 (REVISED, 5TH EDITION).

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### Precautions Against Small-Pox—The Diagnosis of Small-Pox.

Owing to the great infrequency of small-pox at the present day resulting from the general adoption of vaccination, comparatively few physicians have had an opportunity of becoming familiar with its symptoms. The careful quarantine of the disease by the vigilant health authorities in all our cities still further diminishes the chance of a medical student ever seeing a case. In former days, the family physician was also the preceptor of students and took them with him in his daily round of visits. In this way they were frequently enabled to study infectious diseases by the bedside. Now all this is changed. Clinical teaching is given only at the general hospitals, and from them such diseases are very properly excluded. Hence, it has come about that on the first appearance of small-pox in a country village, it is almost invariably mistaken for some other less dangerous disease and many persons become infected before its true nature is recognized. This Board, therefore, deems it important to call the attention of physicians to the salient points which distinguish this disease from all others.

In the first place, let it be borne in mind that the mildness or severity of the attack has little or no value as a diagnostic indication. Because the patient is able to be up and about, even well enough to work or to play, is not a sufficient reason to conclude that he is not suffering from small-pox. Nor is the absence of, or failure to perceive, the so-called characteristic odor of small-pox ground for deciding against the presence of that disease. The same may be said of the secondary or suppurative fever.

The disease with which it is most easily confounded during the first few hours of the eruption is measles, and if there has been no small-pox in the neighborhood this mistake may be readily made. The appearance of vesicles or papules, however, will soon clear up this question, and the diagnosis will then be between chicken-pox and small-pox. If the disease be small-pox, on passing the finger over the surface the papules will feel firm and hard under the skin, like small peas or shot, while no such impression will be given in the case of chicken-pox. If it be the latter disease, pressure made with the thumb and finger on either side of the papule in such a way as to stretch the skin tightly over it will almost entirely efface

it, while no such effect will be produced in the case of the small-pox papule, owing to the fact that it is formed in the deep layer of the skin.

In both diseases the papules soon begin to form blisters (vesicles) on the summit, and in both, these are filled with a clear or cloudy fluid. In the case of chicken-pox, this characteristic is maintained until the vesicles dry up, but in small-pox the fluid rapidly becomes yellowish and opaque, indicating the formation of pus, and we have the true small-pox pustule. The vesicles of chicken-pox develop much more rapidly than those of small-pox. The small-pox pustules are surrounded by a distinct red areola which is found in chicken-pox. In severe cases of small-pox, the pustules often run together, constituting confluent small-pox. This does not occur in chicken-pox.

Another striking distinction between the vesicle of chicken-pox and the pustule of small-pox is that on or about the sixth day of the eruption the centre of the small-pox pustule begins to sink in, producing a little cup-shaped depression. This is known to physicians as umbilication, and is a sign of great value. The scab forms as the pustule of small-pox dries up, is dark colored, firm and strongly adherent, while that of chicken-pox is lighter in color, less compact, and falls off earlier.

Both of these diseases under discussion are self limiting, that is to say, run a definite course and have a definite duration. They are ushered in by chilliness, followed by fever, accompanied by headache, backache, loss of appetite and often vomiting, but in the case of small-pox the eruption does not make its appearance until the end of the third or the beginning of the fourth day, while in chicken-pox it appears on the second day of the illness. In small-pox, the backache is usually a very prominent feature. The eruption begins as a rule on head and face, often on the upper lip, and then spreads to the body and limbs. In small-pox it is more apt to appear abundantly on exposed surfaces, such as the face and hands, while in chicken-pox it prefers surfaces covered by the clothing. The marks of small-pox, aside from pitting, persist for many weeks, usually producing a brown pigmentation of the skin. The development of pustules on the palms of the hands, the soles of the feet, the ball of the eye and the inside of the month are all strong evidence of the presence of small-pox.

With the development of the eruption, all of the feverish symptoms disappear and in mild cases do not return.

A third disease, however, for which small-pox has recently been mistaken in this State, does not present a self-limited and definite course. I refer to the superficial cutaneous affection known as Impetigo Contagiosa. In this disease, if there be an initial fever, it is usually very slight. A child will go to bed at night feeling as well

as usual, and may wake in the morning with reddish spots on the skin, which soon become blisters, or blebs. These, instead of being round and prominent like those of small-pox are usually flat, irregular in shape and of variable size, and tend to run together, forming crusted patches. As they dry in the centre, they continue moist at the edge and in this way spread, and may last for several weeks. The crust which they form is yellow, bulky, superficial and easily detached, seeming as if stuck on. This disease, simple in nature, is more apt to be confounded with chicken-pox than with small-pox. It often attacks several members of a family one after another.

### Precautions Against Small-Pox.

Small-pox (Variola), and Varioloid are one and the same disease, caused by the same contagium. Varioloid is less severe and rarely fatal, because the system of the patient has been modified by vaccination, but it is just as capable of communicating itself, of being "caught" or "taken" as small-pox, and may communicate the disease in its most virulent form. It demands, therefore, exactly the same.

### Preventive Precautions.

Vaccination is, of course, the one and only preventive. Fortunately, the people of this Commonwealth are so generally well-informed and intelligent, that there is no reason to apprehend a reproduction of the disgraceful scenes of riot and bloodshed, which have in late years been enacted in other countries, in the ignorant attempt to thwart the efforts of the health authorities to check the spread of this pestilence. But carelessness and neglect may reap as baneful a harvest as criminal opposition. Convinced of this, the Board at its very first meeting, passed a resolution instructing the Secretary to prepare a circular, warning the people of this State of the prime necessity of vaccination. Next to the rising of the sun, nothing is more absolutely certain than the fact that successful vaccination, with reliable lymph, repeated with sufficient frequency, is a sure preventive against small-pox. And the fact next in order of positiveness is, that careful vaccination with pure lymph will convey to a person susceptible of small-pox, the vaccine disease or cow-pox, and no other disease. Hence, First, It is important that vaccination should be performed by an educated physician, in order to be assured that the lymph used is pure and reliable, especially if taken from a human being (humanized lymph) and that the vaccination has thoroughly taken. Secondly, If bovine (heifer) lymph is preferred, it should be obtained from an entirely reliable source, in order that it may be, first, free from all impurities, and, secondly, active and efficient.



### Precautions in Regard to Infants.

Every infant should be vaccinated within three months after its birth, unless an educated physician advises to the contrary. Should the first attempt fail, it should be repeated at intervals of a fortnight, until a true sore is produced.

### Precautions in Regard to Children.

Every child should be re-vaccinated before it reaches its twelfth year.

No child should be allowed to enter any school, public or private, without the certificate of a physician that said child has either been successfully vaccinated or has had small-pox.

The following rules are recommended for adoption by all public school boards and trustees.

I. Every child entering the public school of ..... must give satisfactory evidence of protection against small-pox, or be excluded until the rule is complied with.

II. The fact of vaccination and protection shall be entered with each name on the school record and on transfer or promotion lists.

III. Intercourse between the school and a family or house where there is a case of small-pox must be forbidden until official permission is given.

IV. Every school teacher or school officer who discovers a case of this disease among the attendants on the school must report the fact immediately to the local Board of Health, or if there be no local Board, to the State Board of Health.

V. All school books, furnished at the public expense, which have been exposed to the infection of small-pox must be destroyed by fire.

Boards deciding to exercise this power should pass a resolution to that effect, and post a notice for at least ten days, in two or more conspicuous places, within the limits of their respective school board or district organizations. Such notice should offer free vaccination to all who are unable to pay. The power of school boards in country districts as well as in boroughs and cities to enforce vaccination of pupils has been sustained by the courts in this State.

### Precautions in Regard to Adults.

Every adult should be re-vaccinated at least once in twelve years.

### Precautions in the Immediate Presence of an Epidemic.

The State Board of Health recommends that in whatever city, village or town small-pox appears, the entire neighborhood in which

there has been any communication with the patient, or exposure to the contagion, shall be notified that the State Board of Health requires that every person shall be protected by vaccination; that tramps and other persons suspected of infection with small-pox shall be taken in charge by the police and sanitary authorities; that employers shall advise their companies of employed persons to be vaccinated, and in case of small-pox in their vicinity, shall make such vaccination one of the conditions of being continued in employment. This rule should be strictly enforced in all manufactories that make goods which are liable to become infected, and especially should be a standing regulation in paper mills, in public houses and among all classes employed on railroad trains and passenger vessels.

#### Form of Report to the State Board of Health or to the Local Board.

(Name and age)

..... is sick with small-

(Name of house and place)

pox (or varioloid) at ..... The

(Date)

eruption began .....

It is believed that the contagion was taken at .....

by exposure to .....

Number of patients now exposed to patient .....

(Signed) .....

(P. O. address) .....

Request:

(Vaccination, placarding, food, medicine, physician or nurse).—  
Strike out subjects not needed.

Such a notice, with the request that needs to be made, should be sent to the health officer or the nearest member of the local board of health. If a physician is already in attendance, he should sign it; but if no physician has reached the patient, the householder and any other person who has charge of the case should sign the first report and request, and send it to the family physician or to the health

officer. The physician who first sees the case, or the health officer, should write out such a brief report and his own request, and send it by mail to the Secretary of the State Board of Health.

The Board further recommends that the Municipal Authorities shall immediately provide such hospital or place of reception for the sick and infected as is judged best for their accommodation and the safety of the inhabitants, which shall be subject to the regulations of the said authorities, who may cause any sick and infected person to be removed thereto, unless the condition of such person will not admit of his removal without danger of his life, in which case the house or place where he remains shall be considered as a hospital, and all persons residing in or any way concerned within the same shall be subjected to the regulations adopted for the hospital. They shall use all care to prevent the spreading of the infection, and shall give public notice of infected places by displaying yellow flags or printed placards at proper distances, by supervising public conveyances, and by all other means which in their judgment shall be most effectual for the common safety. And whoever obstructs the said authorities, or their agent, in using such means to prevent the spread of the infection, or wilfully removes, obliterates, defaces or handles the yellow flags or other signals so displayed, shall, upon conviction, forfeit, for each offence, a sum of not less than five nor more than one hundred dollars at the discretion of the court, and, in default of payment hereof, shall undergo an imprisonment in the county jail for a period not exceeding sixty days.

### Precautions in the Family.

Every member of the family in which a case occurs should be vaccinated afresh.

### Precautions in the Sick Room.

I. The patient should be placed in one of the upper rooms of the house, the farthest removed from the rest of the family, where is to be had the most complete ventilation and isolation. The room should be instantly cleared of all curtains, carpets, woolen goods, and all unnecessary furniture. The rooms should be kept constantly well ventilated, by means of open windows, and of fires, if necessary. The utmost cleanliness should be observed both with regard to the patient and the room.

II. A basin containing chloride of lime or quick lime in solution, or some other convenient disinfectant, should be kept constantly on the bed for the patient to spit in. Change the clothing of the patient as often as needful, but do not carry it while dry through the house. A large vessel (a tub) containing a disinfectant solution should al-

ways stand in the room, for the reception of all bed and body linens immediately on removal from the person or contact with the patient. Pocket handkerchiefs should not be used, but small pieces of rag should be employed in stead for wiping the mouth and nose; and each piece after being once used should be immediately burned. Two basins, one containing water impregnated with a disinfectant solution, and the other containing plain water, and a good supply of towels, must always be ready and convenient, so that the hands of the nurse may be at once washed after they have been soiled by contact with the patient. All glasses, cups and other vessels used by or about the patient should be scrupulously cleansed before being used by others. The discharges from the bowels and kidneys are to be received, on their very issue from the body, into vessels containing a disinfectant, and immediately removed.

III. No person should be allowed to enter the room except those who are attending upon the sick. A sheet moistened with a strong disinfectant solution and suspended outside the door of the room or across the passage-way leading to it, is necessary to complete the isolation of the patient.

IV. Boiling is the surest way of disinfecting all contaminated clothing. A disinfectant should first be added to the water. Any material which cannot be washed without injury, should be exposed to a dry heat of about 240 degrees Fahr., or fumigated in a closed chamber, as directed below. A hot-air disinfecting chamber should be provided, near all cities, where beds, woolen goods, etc., may be disinfected under the direction of officers appointed by the Board of Health. All articles which can possibly be spared should be destroyed by fire.

V. Small-pox is most contagious during convalescence; therefore, strictly observe that the patient does not mingle with the family until all the scabs are entirely off, and only after a thorough purification by bathing, with a disinfectant in the water, and entire change of clothing.

VI. In case of death, wrap the corpse in a sheet saturated with the strongest disinfecting solution, without previous washing; if the means are at hand inject the cavities of the chest and abdomen with a solution of Chloride of Zinc or other antiseptic fluid; and bury it in a deep grave, within twenty hours, and without a public funeral.

#### Standard Disinfecting Solutions Recommended by the State Board of Health.

1. Standard Solution No. 1.—Dissolve chloride of lime or bleaching powder of the best quality (containing at least twenty-five per

cent. of available chlorine) in soft water in the proportion of six ounces to the gallon.

2. Standard Solution No. 2.—Dissolve corrosive sublimate and permanganate of potash in soft water in the proportion of two drachms of each salt to the gallon.

(NOTE.—1. This solution is highly poisonous. 2. It requires a contact of one hour to be efficient. 3. It destroys lead pipes. 4. It is without odor.)

3. Standard Solution No. 3.—To one pint of Labarraque's Solution of hypochlorite of soda (liquor sodæ chloratæ.—U. S. P.), add five parts of soft water.

4. Standard Solution No. 4.—Dissolve corrosive sublimate in water in the proportion of four ounces to the gallon, and add one drachm of permanganate of potash to give color to the solution as a precaution against poisoning. One fluid ounce of this solution to the gallon of water is sufficiently strong. Articles should be left in it for two hours.

(NOTE.—Corrosive sublimate solutions should be kept in wooden or crockery vessels.)

#### To Disinfect Discharges from the Patient.

Use standard solutions Nos. 1, 2 or 3, keeping a pint of the solution used constantly in vessel ready for any emergency. Let the discharges be passed directly into the solution, and then let a pint more of it be added and allow the whole to stand for some time before being thrown into the sewer, or being buried. Milk of Lime, ordinary white-wash, is also a very good disinfectant for this purpose.

#### To Disinfect Clothing, Towels, Napkins, Bedding and such Textile Fabrics as can be Washed.

Use standard solution No. 4, one ounce to the gallon of water, or use one gallon of solution No. 1, in nine gallons of water. Let the goods soak in the solution for at least three hours,—better four hours, before they leave the room. Stir them up so that the solution may get all through them. After disinfection, boil the goods thoroughly.

#### For the Disinfection of Water Closets, Urinals, Sinks and Cess-pools.

5. Carbolic Acid Solution.—Mix one pint of carbolic acid with two and a half gallons of water.

Standard solution No. 4, diluted with three parts of water may also be used in the proportion of one gallon (of the solution) to every four (estimated) of the contents of the vault. Standard solution No. 1, would require to be used gallon for gallon of the material

to be disinfected. Dry chloride of lime may be sprinkled over the contents of a privy, or standard solution, No. 2, may be made up by the barrel, and four or five gallons be applied daily during the epidemic.

#### To Disinfect the Sick Room After it is Vacated.

Let the room be thrown wide open for several days, for a thorough airing. If papered, let the paper be all removed with care. Then let all the walls, the floors and the woodwork of the room, as well as the furniture, be washed with standard solution No. 4, one pint to four gallons of water, or, of solution No. 1, a quarter of a pint to a gallon of water. Let this work be done most carefully, getting the solution into all crevices. If any dust be present in the corners and crevices, wipe it out with a rag wet in the disinfecting fluid. Don't stir it up with a brush or broom. Last of all, whitewash the walls and the ceiling.

#### Sulphur Fumigation.

Is believed in by many as very efficacious, but should not be allowed to take the place of the scraping and the rubbing. It is performed in the following manner: Open wide all the drawers and closet doors. Hang on lines, opened up as much as possible, all the woolen articles which have been in the room during the sickness and which have not been disinfected and washed, then burn two pounds of sulphur for every thousand cubic feet of space in the room. Every opening in the room—flues, doors, windows, cracks and crevices—must be closed, except the door by which the disinfector is to escape. The sulphur is to be burned in an iron kettle or other vessel set in a tub, containing a little water to guard against fire. A little alcohol or kerosene must be poured upon the sulphur by means of which it may be ignited. A small quantity of water evaporated at the same time will add to the efficiency of the fumes. Leave the room quickly, for the fumes are highly poisonous when breathed, and close the door tightly. Let the room remain closed twenty-four hours or more. Then air thoroughly for several days.

#### Formaldehyde (Formalin).

This comparatively new substance promises to supersede sulphur as an aerial or gaseous disinfectant. Not only does it appear to be more penetrating and more destructive to germ life, but it possesses the very great advantage of not injuring the colors of fabrics, or wall papers, or tarnishing and corroding metallic surfaces. It is also known as Formic Aldehyde, and is a gas developed by the action

of a red hot surface of platinum on the vapor of wood alcohol, or wood spirit (methyl-alcohol. A saturated (40 per cent.) solution of this gas in water is sold under the name of Formalin.

The gas may be generated directly in the apartment to be disinfected, the same precautions being taken as regards stopping up crevices as in using sulphur fumes. Formalin may be mixed with water in the proportion of two parts to the hundred, and applied with a sprayer directly to surfaces to be treated, or may be forced undiluted into the closed apartments through a key-hole or other orifice, in the form of vapor or atomized fluid.

Another mode of application is to dilute Formalin with an equal quantity of water, and evaporate it in wide pans by gentle heat. For every 1,000 cubic feet of air space, a pint of this mixture is required, or it may be evaporated from sheets moistened with a mixture of one part of Formalin to two of water and hung up in the room. For this method, three pints of the mixture should be evaporated for every 1,000 cubic feet of air space.

The temperature of the room should not be allowed to fall below 60 degrees F.

There is testimony of convincing character both from scientific experiments and practical health officers as to the efficiency of all these modes of application.

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## THE LAW FOR THE PREVENTION AND RESTRICTION OF SMALL-POX.

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### AN ACT

To provide for the more effectual protection of the public health in the several municipalities of this Commonwealth.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That every physician located or practicing in any of the municipalities of this Commonwealth, who shall know that any person whom she or he is called upon to visit, or who comes or is brought to him or her for examination, is suffering from, or is afflicted with small-pox (variola or varioloid), shall forthwith make report in writing, or upon blanks to be furnished for that pur-

Physicians must report small-pox to health authorities.



Contents of report.

pose, to the health authorities of the municipality in which said person may be located, which said report shall, over his or her own signature, state the name of the disease and the name, age and sex of the person suffering therefrom, and shall also set forth by street and number, or otherwise sufficiently designate the house, room or other place in which said person may be located, together with such other information relating thereto as may be deemed important by said health authorities.

Placards to be placed on or near house.

Variola and varioloid to be placarded as small-pox.

How long placards shall remain on house.

Guards may be placed upon house.

Head of family shall be responsible if placard is destroyed.

Duties of undertaker in case of death.

When body must be placed in coffin.

Section 2. Upon receipt by the health authorities of a report of the existence of a case of small-pox (variola or varioloid), in any of said municipalities, they may at once place, or cause to be placed, in a conspicuous place or places upon or near the house or premises in which said case may be located, a placard or placards upon which shall be printed in large letters the name of the disease: Provided, That variola or varioloid shall be placarded as "small-pox," and said placard or placards shall remain thereon, until such time as the rules and regulations established by the health authorities regarding the destruction or disinfection of infected bedding, clothing or other articles which have been exposed to infection, and the disinfection of houses and premises have been fully complied with: Provided, That in addition to the placarding aforesaid, or in lieu of the same, the said health authorities may place a guard or guards upon said house or premises.

Section 3. The head of the family occupying any house or premises upon or near which said placard or placards aforesaid may be placed, shall be liable for the fine and penalty provided by this act in any case where such placard or placards are removed, defaced, covered up, taken down or destroyed, with his or her knowledge or consent before the time provided by section two of this act.

Section 4. In the care and burial of the bodies of persons who have died of small-pox, in any of the municipalities of this Commonwealth, it shall be the duty of the undertaker or other person or persons having the body in charge, to thoroughly disinfect and place every such body within the coffin or casket in which it is to be buried within six hours after first being called upon to take charge of the same: Provided, Said call is made between the hours of five ante meri-



diem and eleven post meridiem; otherwise such body shall be placed in such coffin or casket within twelve hours, the coffin or casket then to be closed tightly, and not again opened, unless permission be granted by the health authorities for special and satisfactory cause shown: Provided, That the health authorities in any municipality may adopt more stringent rules and regulations than are herein provided for the disinfection, preparation and burial of the bodies of persons who have died of small-pox, which rules and regulations they may from time to time alter or amend.

Coffin must be closed tightly.

Health authorities may adopt more stringent rules.

Section 5. The body of a person who has died of small-pox shall not remain unburied for a longer period of time than thirty-six hours after death, unless special permission be granted by the health authorities extending the time during which said body may remain unburied for special and satisfactory cause shown. The head of the family and the person or persons having charge of the funeral of such body shall be responsible for any violation of the provisions of this section.

Body must be buried within thirty-six hours, unless time be extended by special permission.

Responsibility for violation of this section.

Section 6. All services held in connection with the funeral of the body of a person who has died of small-pox must be private, and the attendance thereat shall include only the immediate adult relatives of the deceased and the necessary number of adult pall-bearers, and any advertisement of such funeral shall state the cause of death. The head of the family and the person or persons having charge of said funeral services shall be responsible for any violation of the provisions of this section.

Funeral services must be private.

Advertisement of funeral must state cause of death.

Violation of this section.

Section 7. The body of a person who has died of small-pox shall in no instance be taken into any church, chapel, public hall or public building for the holding of funeral services. The head of the family, and the person or persons having charge of said funeral services, and the sexton, janitor, or other person or persons having charge or control of such church, chapel, public hall or public building, shall be responsible for any violation of the provisions of this section.

Body shall not be taken into any church or public building.

Violation of this section.

Section 8. No undertaker, or other person or persons having charge of the funeral or burial of the body of a person who has died of small-pox shall in any case furnish or provide for such funeral more than the nec-

Conveyances for use of relatives and pall-bearers.

Conveyances shall be fumigated and disinfected.

essary number of conveyances for said adult relatives and pall-bearers, and all such conveyances which may have been used or occupied by any person or persons who have been residing in the same family or house with the deceased, shall be fumigated and disinfected at such time and in such manner as may be directed and required by the health authorities.

Body must be conveyed in a hearse.

Violation of this section.

Section 9. The body of a person who has died of small-pox shall not be conveyed to or from any dwelling, or other building or place, to any cemetery or other point except in a hearse or other vehicle used for the purpose of conveying corpses only, or in such vehicle as shall be satisfactory to the health authorities, and under such regulations as they may in any case adopt. The undertaker and the person or persons having charge of the funeral or transportation of such body, shall be responsible for any violation of the provisions of this section.

Bedding, clothing, etc., to be disinfected or destroyed after recovery or removal of patient.

Section 10. Upon the removal to hospital or other place, or upon the discharge by recovery or death, of any person or persons who have suffered from small-pox, the premises where the said disease existed, shall be fumigated and disinfected, and the bedding, clothing and other infected articles destroyed, or disinfected, at such time and in such manner, as may be authorized and required by the health authorities. The head of the family or the person or persons having charge of the premises shall be responsible for any violation of the provisions of this section.

Violation of this section.

Children not allowed to attend schools.

Section 11. No child or other person belonging to or residing with the family of any person residing in the same house in which any person may be located who is suffering from small-pox (variola or varioloid), shall be permitted to attend any public, private, parochial, Sunday or other school in said municipalities, and all school principals, Sunday school superintendents or other persons in charge of such schools, are hereby required to exclude any and all such children and persons from said schools, such exclusion to continue for a period of thirty days following the discharge by recovery or death of the person last afflicted in said house or family, or his or her removal to hospital, and the thorough disinfection of the premises, and all such children or other persons as aforesaid, before being permitted to attend or return to school,

Shall be excluded for thirty days after recovery of person last afflicted in house.

shall furnish to said principal or other person in charge of said schools a certificate signed by the medical attendant of said children or persons, or by a physician to be designated by the health authorities of said municipalities, setting forth that the thirty days mentioned in this section, have fully expired: Provided, however, That the health authorities may by rule or regulation provide that such certificates shall only be given by a person to be designated by said authorities, and in such case no other certificate shall be recognized.

Must have certificate from medical attendant.

Proviso.

Section 12. All principals or other persons in charge of schools as aforesaid are hereby required to refuse the admission of any child to the schools under their charge or supervision, except upon a certificate signed by a physician, setting forth that such child has been successfully vaccinated, or that it has previously had small-pox.

Principals of schools must refuse admission of children except on certificate showing that child has been vaccinated or has had small-pox.

Section 13. The health authorities of said municipalities shall furnish to principals or other persons in charge of said schools, and to physicians the necessary certificates or blanks for the uses and purposes as set forth and required in sections one, eleven and twelve of this act. The registry of said schools shall exhibit the names and residences of all children or persons admitted or rejected for reasons set forth in this act, and said registry shall be open at all times to the inspection of the health authorities.

Blanks shall be furnished principals of schools.

School registry of all children admitted or rejected under provisions of this act.

Section 14. It shall be the duty of the health authorities in the several municipalities as aforesaid, to furnish daily, by mail or otherwise, to principals or other persons in charge of said schools, a printed or written bulletin, containing the name, location and disease of all persons suffering from small-pox (variola or varioloid), upon receipt by them of reports of such cases from physicians as required in section one of this act: Provided, That the health authorities of any municipality may, in lieu of the daily bulletin herein required, provide that a notice shall be given to the school or schools attended by the children in whose home or residence any of the diseases mentioned in this section exist, and prescribe the form of said notice.

Health authorities shall furnish daily reports to schools.

Contents of reports.

Proviso.

Section 15. No person suffering from small-pox, nor any one who has charge of a person so suffering, shall

Person suffering from small-pox or his attendant shall not enter carriage or public conveyance without notifying owner or driver.

Disinfection of such conveyance.

Exposure of person suffering from small-pox.

Use of bedding, etc., exposed to infection.

Room or house shall not be let until same is entirely disinfected.

Guest at hotel, boarding house or apartment house.

Rules and regulations shall be established by health authorities.

Penalty for violation of any of the provisions of this act.

enter any hired vehicle or other public conveyance, or permit any one who is in his or her charge who is so suffering to enter such vehicle without previously notifying the owner or driver thereof that he or the person in his charge is so suffering, and the owner or driver of such vehicle shall immediately provide for the disinfection of such conveyance after it has, with the knowledge of such owner or driver, conveyed any such sufferer, under the direction of the health authorities.

Section 16. No person suffering from small-pox shall wilfully expose himself or herself in any street, or public place, or public conveyance, nor shall any person in charge of one so suffering thus expose the sufferer.

Section 17. No person shall without previous disinfection, give, lend, sell, transmit or expose any bedding, clothing, rags or other articles which have been exposed to infection: Provided, That such restriction shall not apply to the transmission of articles, with proper precautions, for the purpose of having the same disinfected.

Section 18. No person shall knowingly let any room, house or part of a house, in which there has been a person suffering from small-pox without having such room, house or part of a house, and all articles therein liable to infection, previously disinfected to the satisfaction of the health authorities. The keeping of a hotel, boarding house or apartment house shall be deemed as letting a part of a house to any person who shall be admitted as a guest into such hotel, boarding house or apartment house.

Section 19. The health authorities of the several municipalities of this Commonwealth shall, and they are hereby authorized and empowered to establish rules and regulations regarding the isolation of persons who may be suffering from small-pox, and for the destruction, disinfection and fumigation of bedding, clothing or other infected articles, and for the disinfection and fumigation of houses and premises, and for the carrying out of the provisions of this act, as they may in good faith declare the public safety and health demand, which rules and regulations they may from time to time alter or amend.

Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton,

janitor, head of a family or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate any of the provisions or requirements of this act, shall for every such offense, upon conviction thereof before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offence was committed, be liable to a fine or penalty therefor of not less than five dollars, or more than one hundred dollars, which said fines or penalties shall be paid into the treasury of said municipality, and in default of payment thereof, such person or persons so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days.

Fines to be paid  
into treasury of  
municipality.

Imprisonment.

Approved—The 18th day of June, A. D. 1895.

DANIEL H. HASTINGS.

Note.—The constitutionality of the above act has been affirmed By His Honor, Judge Morrison, in the case of W. F. Sprague vs. J. E. Baldwin and others, school directors and teachers of the school district of Otto township, and by His Honor, Judge McPherson, in the case of Martin F. Nissley vs. Charles Hollet et al., directors of the school district of Hummelstown borough.

With regard to the doubt existing in the minds of many school directors in rural districts outside of cities and boroughs as to their authority and responsibility with regard to the enforcement of this law, that question was decided by His Honor, Judge Morrison in re W. F. Sprague vs. J. E. Baldwin and others, school directors and teachers of the school district of Otto township. His decision, in brief, was that the act of June 18, 1895, relating to the vaccination of children in public schools, applies to township school districts and is not limited to cities and boroughs, a township being, in the eyes of the law, a municipal corporation. This was evidently the opinion of the Legislature in passing the law. This decision further states with regard to the question of the suggested incompatibility of this act with the act of May 16, 1895, relating to compulsory education, that "statutes enacted at the same session of the Legislature are within the reason of the rule governing the construction of statutes in paria materia, and should, if possible, receive a construction which will give effect to each." The act of June 18, 1895, relating to vaccination, and the act of May 16, 1895, relating to compulsory education should be construed so that both may stand. In the course of this decision His Honor uses the following language:

"It cannot be doubted that the legislative intent was to include both townships and school districts in this act.

"So we cannot escape the conclusion that the title of the act of June 18, 1895, is broad enough to cover legislation for all of the municipal sub-divisions of the Commonwealth, down to and including townships and school districts. Surely, the legislative intent was to protect public health from contagions, epidemics, public funerals of cholera, small-pox and scarlet fever victims, and for the courts to hold that the legislative intent was to limit this important legislation to cities and boroughs, and to leave these diseases to run riot in the townships would be to convict the Legislature of doing a ridiculous thing. It is probable that one-half of the population of the State is outside of the cities and boroughs, and, therefore, in the townships.

"How absurd to say that the legislative intent was to protect the citizens of the cities and boroughs and leave those of the townships to be exposed without protection."

Quite independently of this law, however, school boards have authority to make vaccination a pre-requisite to the attendance of a child on a public school. Justice Woodward, in delivering the opinion of the Supreme Court in the case of Wharton et al., vs. School Directors, 42 Pa. Statutes, 363, says: "School boards belong to that class of quasi corporations to which counties and townships belong, exercising within a prescribed sphere many of the faculties of the corporation, and the directors are invested with various discretionary powers in the execution of the school laws for which they are responsible only to the people whose representative they are."

Judge Metzger, in the case of A. J. Duffield vs. the School Board of Williamsport, Common Pleas Court, Lycoming county, No. 503, March term, 1894, says: "It is clearly the right as well as the duty of the board of school directors in case of imminent danger of the spread of contagious diseases to do everything in their power that may be necessary to prevent such disease from being carried and transmitted to the pupils of the school by those infected with it, and those, who by reason of their contact with infected persons, are likely to inoculate others with whom they are allowed to mingle. This power, if it exists, could not be advantageously exercised in any other way than by the exclusion from the school of the parties who are likely to spread disease among the pupils. If the board of school directors had in no such case such power they would be powerless to preserve the existence of the schools during the period when contagious diseases were abroad in the neighborhood."

The same decision asserts the right of councils to pass an ordinance ordering that no pupil shall be permitted to attend school without a certificate of vaccination.



CIRCULAR NO. 10 (MODEL ORDINANCE REVISED).

Model Regulations for Boards of Health.

Regulations of the Board of Health of the ..... of .....

Section 1. Whatever is dangerous to human life or health, whatever renders the air or food or water or other drink unwholesome, and whatever building, erection, or part or cellar thereof, is overcrowded, or not provided with adequate means of ingress and egress, or is not sufficiently supported, ventilated, sewerred, drained, cleaned or lighted, are declared to be nuisances, and to be illegal; and every person having aided in creating or contributing to the same, or who may support, continue or retain any of them, shall be deemed guilty of a violation of these regulations, and also be liable for the expense of the abatement and remedy therefor.

Nuisances defined.

Section 2. No house-refuse, offal, garbage, dead animals, decaying vegetable matter, or organic waste substance of any kind shall be thrown on any street, road, ditch, gutter or public place within the limits of this ....., and no putrid or decaying animal or vegetable matter shall be kept in any house, cellar or adjoining out-building or grounds for more than twenty-four hours.

House refuse, garbage, etc., not to be exposed.

Section 3. No person or persons, without the consent of the Board of Health shall build or use any slaughter house within the limits of this ..... and the keeping and slaughtering of all cattle, sheep and swine, and the preparation and keeping of all meat, fish, birds or other animal food, shall be in the manner best adapted to secure and continue their wholesomeness as food; and every butcher or other person owning, leasing or occupying any place, room or building wherein any cattle, sheep or swine have been, or are killed or dressed, and every person being the owner, lessee or occupant of any room or stable wherein any animals are kept, or of any market, public or private, shall cause such place, room or building,

Slaughter houses, cattle yards, hog pens, etc., to be kept clean.

stable or market, to be thoroughly cleansed and purified, and all offal, blood, fat, garbage, refuse and unwholesome and offensive matter to be removed therefrom at least once in every twenty-four hours, after the use thereof for any of the purposes herein referred to, and shall also at all times keep all woodwork, save floors and counters, in any building, place or premises aforesaid thoroughly painted or whitewashed; and the floors of such building, place or premises shall be so constructed as to prevent blood or foul liquids or washings from settling in the earth beneath.

Section 4. No blood-pit, dung-pit, offal-pit or privy-well shall remain or be constructed within any slaughter house. Any one offending against this rule shall be guilty of creating and maintaining a nuisance prejudicial to public health, and shall be required to remove the nuisance within ten days from the date of notice.

Section 5. The owners, agents or occupiers of all slaughter houses are required, during the months of June, July, August and September to distribute twice in each week not less than twenty-five pounds of chloride of lime about their premises, and also to remove the contents of any manure-pit or manure-pile on the premises, once in each week, the said premises and contents of manure-pits being hereby declared to be nuisances prejudicial to public health, unless subjected to frequent disinfection and cleaning as herein indicated. No pigs or hogs shall be kept in the same enclosure with a slaughter house; nor shall they be fed, there or elsewhere, upon the offal of slaughter animals.

Bone boiling and other offensive trades—how to be conducted.

Section 6. No person or company shall erect or maintain within the limits of this . . . . . any manufactory or place of business dangerous to life or detrimental to health, or where unwholesome, offensive or deleterious odors, gas, smoke, deposit or exhalations are generated, such as tanneries, refineries, manufactories of starch, glue, leather, chemicals, fertilizers, gas, etc., etc., without the permit of the Board of Health, and all such establishments shall be kept clean and wholesome so as not to be offensive or prejudicial to public health; nor shall any offensive or deleterious waste-substance, refuse or injurious matter be allowed to accumulate upon the premises, or be



thrown or allowed to run into any public waters, stream, water-course, street, road or public place. And every person or company conducting such manufacture or business shall use the best approved and all reasonable means to prevent the escape of smoke, gases and odors, and to protect the health and safety of all operatives employed therein.

Section 7. The business of bone and horse-boiling shall not be allowed, unless conducted under cover, the building to be provided with smoke-consumers, and a due regard be had to cleanliness in the disposition of the offal. No bone-boiling establishment or depository of dead animals shall be kept or erected in any part of this . . . . . without a permit from the Board of Health.

Section 8. No permit shall be granted to any person or persons to carry on the business of boiling bones and dead animals until after a careful inspection of the locality, buildings and apparatus, and of the plans for conducting the business, by an accredited Inspector of the Board of Health.

Section 9. No bone-boiling establishment or depositories of dead animals shall be kept or erected in or near to a thickly inhabited neighborhood.

Section 10. The floors of all bone-boiling establishments and depositories of dead animals shall be paved with asphalt or with brick or stone, well laid in cement, or with some other impervious material, and shall be well drained; and all such establishments shall have such an adequate water supply as will enable thorough cleanliness to be maintained.

Section 11. The boiling of bones and dead animals, etc., shall be conducted in steam tight kettles, boilers or caldrons, from which the foul vapors shall first be conducted through scrubbers or condensers, and then into the back part of the ash-pit of the furnace fire, to be consumed, or by other apparatus equally efficient in preventing or counteracting the offensive effluvia.

Section 12. When bones are being dried after boiling, they shall be placed in a close chamber, through which shall be passed by means of pipes, large volumes of fresh air, the outlet pipe terminating in the fire-pit.

Section 13. All proprietors of bone boiling establishments not having on the . . . . . day of

..... permits to carry on the business, and violating these regulations shall be fined for every such offense, and for each month's continuance of the same, after notice, and also be liable to indictment at common law for creating and maintaining a nuisance.

Section 14. The Permit Clerk of the Board of Health shall have provided a book in which to enter the names of all persons engaged in the business of boiling bones and having depositories of dead animals; also, the location of works and appliances as reported by the Inspector; whether licensed or not; the number and date of permit; and remarks.

Stables to be kept clean.

Section 15. The keeper or keepers of a livery or other stable shall keep his or their stable and stable-yard clean, and shall not permit, between the 15th day of May and the 1st day of November, more than ..... wagon loads of manure to accumulate in or near the same at any one time, except by express permission of the Board of Health, nor shall any manure be removed between the dates aforesaid, except between twelve o'clock at night and two hours after sunrise, without a written permit from the Board of Health, nor shall any manure be removed except in a tight vehicle, so protected that the manure, in process of removal, may not be dropped or left in any street, road, lane or way of the .....

Pig pens to be properly constructed and kept clean.

Section 16. No pig pen shall be built or maintained within the limits of this ..... without a permit from the Board of Health or within one hundred feet of any well or spring of water used for drinking purposes, or within thirty feet of any street or of any inhabited house unless constructed in the following manner, viz: So that the floor or floors of the same shall be not less than two feet from the ground, in order that the filth accumulating under the same may be easily removed; and such filth accumulating in, about and under the same shall be removed at least once a week and oftener if so ordered, and on the failure of any owner or occupier of such premises so to do, then the same shall be done by the Board at the expense of the maintainer.

Privies not to remain near wells of drinking water.

Section 17. No privy-vault, cess-pool or reservoir into which a privy, water-closet, cess-pool, stable or sink is drained, unless it is water-tight, shall be constructed, dug or permitted to remain within one hun-

dred and fifty feet of any well, spring or other source of water used for drinking or culinary purposes, unless the surface of such vault, cess-pool or reservoir is at a lower level than the bottom of such well. Earth privies and earth closets, with no vault, pit or depression below the surface of the ground, shall be excepted from this regulation, but sufficient dry earth or coal ashes must be used daily to absorb all the fluid part of the deposit, and the contents must be completely removed at least once every month.

Section 18. All privy vaults, cess-pools or reservoirs as above named, shall be cleaned out at least twice a year, once in the spring not later than the 15th of May, and once in the autumn not earlier than the 15th of October. From the 15th of May to the 15th of October of each year, they shall be thoroughly disinfected by adding to their contents, once every week, from one to four gallons of a disinfectant solution, according to the size of the said vault, cess-pool or reservoir.

To be frequently cleaned and disinfected.

Section 19. No person shall engage in, or continue in, the business of plumbing or constructing systems of house drainage and cess-pools, either as master plumber or as journeyman until he has registered his name with the Board of Health and received a license to carry on such business.

Section 20. No sewer drain shall empty into any lake, pond or other source of water used for drinking purposes, or into any standing water, within the jurisdiction of this ..... All sewer drains shall be water-tight within the limits of this .....

Sewer drains not to contaminate water supply.

Section 21. The sewage from each building on every street provided with a common sewer hereafter erected shall be conducted into said sewer.

Section 22. That portion of the house drain which is outside of the building and more than four feet from the foundation walls, shall be constructed of iron pipe or vitrified drain pipe.

House drains—how connected with sewers.

Section 23. That portion of the drain pipe outside or under the building, and within four feet of the foundation walls, together with the soil pipe, shall be constructed of cast iron with lead joints, or of wrought iron pipe with screwed joints, and in either case protected from rust. The waste-pipe connected with the conductors from the roofs, and other pipes inside the

building, or outside and within four feet of the foundation walls, shall likewise be constructed of cast iron with leaded joints, or of wrought iron with screwed joints.

Section 24. The house drain and other pipes for the conveyance of sewage shall be laid with uniform grade and with a fall not less than one inch in four feet, except in those cases where the Board of Health may permit otherwise.

Section 25. All pipes connecting a water closet with a soil pipe shall be trapped, each separately. All waste pipes shall be trapped, each separately, and close to the connections with each bath, sink, bowl or other fixture, unless adequate provision is made for downward ventilation through said waste-pipes, in which case one trap may serve for several fixtures.

Section 26. All soil pipes shall be carried at their full size through the roof and left open. A provision shall also be made for admitting air to the house-drain side of the main trap, if such trap exists.

Section 27. The joints in the vitrified pipe shall be carefully cemented under and around the pipe, and the joints in the cast iron pipe shall be run and calked with lead.

Section 28. All changes in direction shall be made with curved pipes. All joints and pipes shall be made air-tight. The whole work shall be done by skillful mechanics, in a thorough and workmanlike manner, and satisfactory to the Board of Health.

Section 29. Before proceeding to construct any portion of the drainage system of a hotel, tenement, dwelling house or other building, the owner, builder or person constructing the same, shall file with the Board of Health a plan thereof, showing the whole drainage system, from its connection with the common sewer to its terminus in the house, together with the location and size of all branches, traps, ventilating pipes and fixtures.

Section 30. All drains now built shall be reconstructed whenever, in the opinion of the Board of Health it may be necessary.

Diseases dangerous to public health enumerated.

Section 31. The following diseases are declared to be communicable and dangerous to the public health, viz: Small-pox, (variola, varioloid), cholera (Asiatic or epidemic), scarlet fever (scarlatina, scarlet rash),

measles, diphtheria (diphtheritic croup, diphtheritic sore throat), typhoid fever, typhus fever, yellow fever, spotted fever (cerebro-spinal meningitis), relapsing fever, epidemic dysentery, hydrophobia (rabies), glanders (farcy), plague and leprosy, and shall be understood to be included in the following regulations, unless certain of them only are specified.

Section 32. Whenever any householder knows that any person within his family or household has a communicable disease, dangerous to the public health, he shall immediately report the same to the Board of Health, giving the street and number, or location of the house.

Householders required to report.

Section 33. Whenever any physician finds that any person whom he is called upon to visit has a communicable disease, dangerous to the public health, he or she shall immediately report the same to the Board of Health, giving the street and number or location of the house, on the receipt of which report the . . . . .

Physicians required to report.

. . . . . shall immediately notify the teacher or principal of every school, academy, seminary or kindergarten in the . . . . . requesting said teachers or principals to dispense with the attendance of all pupils residing in the family in which such disease exists. No physician who may, in good faith, in obedience to these regulations, report a case as one of communicable disease which subsequently proves not to be such, shall be liable to a suit for damages for such error in reporting. It shall be the duty of such physician and of all other attendants upon persons affected with such diseases to avoid exposure to the public of any garments or clothing about their own persons that may have been subjected to the risk of infection.

School teachers to be notified.

Physicians not to be sued for mistakes in obeying this regulation.

Section 34. No person shall, within the limits of this . . . . ., unless by permit of the Board of Health, carry or remove from one building to another any patient affected with any communicable disease, dangerous to the public health. Nor shall any person, by any exposure of any individual so affected, or of the body of such individual, or of any article capable of conveying contagion or infection, or by any negligent act connected with the care or custody thereof, or by a needless exposure of himself

Exposure of infected persons or things forbidden.

or herself, cause or contribute to the spread of disease from any such individual or dead body.

Funerals after infectious diseases forbidden.

Section 35. There shall not be a public or church funeral of any person who has died of Asiatic cholera, small-pox, typhus fever, diphtheria, yellow fever, scarlet fever, plague or measles, and the family of the deceased shall in all cases limit the attendance to as few as possible, and take all precautions possible to prevent the exposure of other persons to contagion or infection; and the person authorizing the public notice of death of such person, shall have the name of the disease which caused the death appear in such public notice.

Public notice of cause of death required.

Public conveyances not to be infected.

Section 36. No person suffering from, or having very recently recovered from small-pox, scarlet fever, diphtheria, yellow fever, or measles shall expose himself, nor shall any one expose any one under his charge in a similar condition, in any conveyance, without having previously notified the owner or person in charge of such conveyance of the fact of such condition as above stated. It shall be the duty of the Board of Health to have this section printed on a card, and to furnish the owner of each public conveyance with a copy thereof; and it shall be the duty of the owner of such conveyance to display such card in such conveyance. And the owner or person in charge of such conveyance must not, after the entry of any person so infected into his conveyance, allow any other person to enter it without having sufficiently disinfected it under the direction of the Board of Health.

Infected conveyances not to be used until disinfected.

Infected houses or rooms not to be let.

Section 37. No person shall let or hire any house, or room in a house, in which a communicable disease, dangerous to the public health, has recently existed, until the room or house and premises therewith connected have been disinfected to the satisfaction of the Board of Health, and for the purposes of this section, the keeper of a hotel, inn or other house for the reception of lodgers, shall be deemed to let or hire part of a house to any person admitted as a guest into such hotel, inn or house.

Isolation of families required.

Section 38. Members of any household in which small-pox, diphtheria, scarlet fever or measles exists, shall abstain from attending places of public amusement, worship or education, and, as far as possible, from visiting other private houses.

Section 39. The clothing, bed clothing and bedding of persons who have been sick with any communicable disease, dangerous to the public health, and the rooms which they have occupied during sickness, together with their furniture, shall be disinfected under the direction of the Board of Health.

Disinfection required.

Section 40. No pupil shall be allowed to attend the public schools in this ..... except upon a certificate signed by a physician setting forth that such child has been successfully vaccinated or that it has previously had small-pox.

Vaccination of school children required.

Section 41. No parent, guardian or master, in whose house or family there shall have been a communicable disease, dangerous to the public health, shall permit any child residing in said house or family to attend any public, private or Sunday school, after the cessation of said disease, within a period of thirty days after the house shall have been thoroughly disinfected and cleansed. And it shall be the duty of the school board to have this section printed on cards, mentioning the names of diseases declared communicable and dangerous to the public health in these regulations, and posted in every school room in this .....; and it shall be the duty of each teacher to read the section to the school at least once a month and whenever any epidemic shall appear. And it shall be the duty of the Board of Health to have this section printed on cards and furnished to every private school, academy, seminary, kindergarten and Sunday school in this ....., and to request the person or persons in charge of such private institutions to post such cards in conspicuous places, and read the section to the school at least once a month, and whenever any epidemics shall prevail.

Period of isolation established for school children.

Children to be instructed in regard to danger of infection.

Section 42. No meat, fish, birds, fowls, fruit, vegetables, milk and nothing for human food, not being then healthy, fresh, sound, wholesome, fit and safe for such use, nor any animal or fish that died by disease, and no carcass of any calf, pig or lamb, which at the time of its death was less than three weeks old, and no meat therefrom shall be brought within the limits of this ..... or offered or held for sale as food anywhere in said .....

No unwholesome food to be sold.

Section 43. It shall be the duty of the occupant of every house within the limits of this .....

Cellars to be cleansed.



in the month of May, in each and every year, to cleanse the cellars thereof of all dirt, vegetable and other impure matter calculated to engender disease, and to cause them to be thoroughly white-washed with fresh lime.

**Compulsory vaccination**

Section 44. It shall be the duty of every adult and every parent, guardian or master of every minor residing within the limits of this ..... who has not had small-pox, or been vaccinated so as to have taken cow-pox regularly, to be, if an adult, vaccinated, or, in the case of a minor, to cause such minor to be vaccinated within six months from the date of the adoption of these regulations, unless unable to do so by reason of poverty; and it shall be lawful for any regularly educated physician residing in this ..... on application of such resident adult, or parent, master or guardian of such resident minor, as are unable by reason of poverty to pay the vaccination fee, to vaccinate said adult or said minor, and present his bill therefor, properly authenticated, for an amount not exceeding the fee usually charged for such services, and to recover the same of and from the corporation.

**Infected animals to be excluded.**

Section 45. No animal affected with a communicable disease, dangerous to the public health, shall be brought or kept within the limits of this ..... except by permission of the Board of Health, and the bodies of animals dead of such disease or killed on account thereof shall not be buried within five hundred feet of any residence, nor disposed of otherwise than as the said Board or its health officer shall direct.

**Milk not to be adulterated.**

Section 46. No milk which has been watered, adulterated, reduced or changed in any respect from its natural condition by the addition of any foreign substance, shall be brought into, held, kept or offered for sale at any place in this .....

**Certificate of death and burial permits.**

Section 47. Every undertaker or other person who may have charge of the funeral of any dead person, shall procure a properly filled out certificate of the death and its probable cause, in accordance with the form prescribed by the State Board of Health; and shall present the same to the designated officer or member of the Board of Health, and obtain a burial or transit permit thereupon, at least twenty-four hours before the time appointed for such funeral; and



he shall not remove any dead body until such burial or transit permit shall have been procured.

Section 48. Every person who acts as a sexton or undertaker, or cemetery keeper, within the limits of this . . . . . or has the charge or care of any tomb, vault, burying ground or other place for the reception of the dead, or where the bodies of any human beings are deposited, shall so conduct his business and so care for any such place above named, as to avoid detriment or danger to public health; and every person undertaking preparations for the burial of a body dead from communicable diseases as hereinbefore enumerated, shall adopt such precautions as the Board of Health may prescribe to prevent the spread of such disease. No dead body shall be exhumed and removed between the months of May and October, inclusive, and no body dead from small-pox shall be exhumed and removed unless by permission of the State Board of Health.

Sextons, cemetery  
keepers, etc.

Section 49. Any person who shall fail, neglect or refuse to comply with, or who shall violate the provisions or requirements of sections 19 to 30, inclusive, shall on conviction, be sentenced to pay a fine of not less than \$5.00 nor more than \$100.00, or undergo an imprisonment not exceeding one year, or both, in the discretion of the court.

Section 50. Any physician, undertaker, principal of a school, superintendent of a Sunday School, sexton, janitor, head of a family, or any other person or persons who shall fail, neglect or refuse to comply with or shall violate any of the provisions or requirements of sections 31 to 41, inclusive, shall, for every such offense, upon conviction thereof before any mayor, burgess, alderman, police magistrate or justice of the peace, be liable to a fine or penalty of not less than \$5.00 or more than \$100.00, and in default of payment thereof such persons so convicted shall undergo an imprisonment in the county jail for a period not exceeding sixty days.

Section 51. Any person who shall fail, neglect or refuse to comply with the provisions or requirements of any other section or provisions of these regulations than those mentioned in the two preceding sections, shall be liable, upon conviction before any mayor

burgess, alderman, police magistrate or justice of the peace, to a fine of not less than \$5.00 or more than \$100.00, at the discretion of the convicting mayor, burgess, alderman, police magistrate or justice of the peace, besides costs, which the convicting mayor, burgess, alderman, police magistrate or justice of the peace may inflict if he see fit.

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### CIRCULAR NO. 44.

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#### Model Rules for Boards of Health.

Rules of the Board of Health of the ..... of .....

I. The Board shall be organized on the first ..... in ..... in each and every year, by the election of a President and Secretary, to serve for the ensuing year.

II. The Board shall hold stated meetings on ..... of every ....., at .... o'clock, ..., and it may hold special meetings when convened by order of the President, or at the call of any two of its members.

III. The hours for the transaction of business of the Health Office shall be from ..... to ....., Sundays excepted.

#### The President.

IV. The President shall preside at the meetings of the Board, preserve order and decorum, and appoint the members of committees, unless otherwise directed.

V. In the absence of the President, a chairman for the meeting shall be appointed.

#### The Secretary.

VI. The Secretary shall keep accurate minutes of the proceedings of the Board, and conduct such correspondence as the Board may direct and approve, and shall prepare and transmit to the Secretary of the State Board of Health an annual report of the organization and work of the Board.

### Elective Officers.

VII. At the first stated meeting in ..... of each year, there shall be elected a Clerk,† an Inspector, a Health Officer, a Vaccine Physician or Physicians, and a Sanitary Policeman or Policemen; all of whom shall enter upon their duties on the first day of ..... following, and continue in office until discharged by action of the Board, or others are elected in their stead.

### Committees.

VIII. The following standing committees shall be appointed annually, at the first meeting after the organization of the Board:

1. A Sanitary Committee, consisting of three members.
2. A Committee on Office and Library, consisting of one member.
3. A Committee on Burial Grounds and Registration, consisting of two members.
4. A Committee on Accounts, consisting of two members.
5. A Committee on Nuisances, consisting of three members.

### Sanitary Committee.

IX. The Sanitary Committee shall be entrusted, subject to the general superintendence, orders and by-laws of the Board, with the exercise and performance of those powers and duties vested by law in the Board of Health, so far as relates to the prevention and spread of contagious diseases, and likewise with the management of such hospitals for contagious diseases as the Board shall at any time order to be opened: Provided, That no important addition, alteration or improvement be undertaken in relation to the same without the sanction of the Board.

X. The said Committee shall hold stated meetings once every month, and special meetings upon the call of the Chairman, or of any two members thereof.

XI. At the first stated meeting subsequent to their appointment, the Committee shall elect from among themselves a Secretary, who shall keep in a book provided for that purpose, fair minutes of all their proceedings.

XII. The Committee shall cause every reported case of contagious disease existing within the limits of the jurisdiction of the Board of Health to be visited without delay, and shall be authorized to take such other measures in relation thereto as a majority of the members shall deem proper.

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†NOTE.—The Secretary shall be eligible to the office of Clerk. The same individual may discharge the duties of Health Officer, Vaccine Physician, Inspector and Sanitary Policeman. These rules are of necessity so drafted as to suit the requirements of large towns and must be modified judiciously to meet the conditions of boroughs having a small population.

XIII. Whenever a report shall be received at the Health Office, that a case of any contagious disease has occurred within the limits of the jurisdiction of the Board of Health, one of the members of the Committee, or, should no member be present, the Clerk of the Board shall forthwith give notice thereof to the Health Officer, or to any physician appointed to inquire into the nature of the case, who shall visit the same, and send to the Health Officer, without delay, a written report in relation thereto. If the report of the physician be such as to require the attention of the Committee, the Clerk shall notify the members of the same immediately.

XIV. When necessary, the Board shall appoint one or more physicians to perform the duties specified in the preceding section, and shall determine the compensation to be paid for the services of the same.

XV. Whenever the Board, upon a representation from the Sanitary Committee, shall determine it to be expedient to provide and hold in readiness one or more hospitals for contagious diseases, temporary or permanent, the Committee shall select the location of the same, secure the services of competent nurses, and otherwise put those establishments in condition to be opened with the least delay possible for the reception of patients, while the Board shall appoint one or more physicians to attend the sick, and shall determine the compensation to be paid to them, as also to the nurses for their services.

XVI. As soon as practicable after the Board has determined to provide such hospital or hospitals, the Sanitary Committee shall arrange and submit to the Board for its approbation, the plan of hospital operations, so that everything may be conducted economically and efficiently, from the day the hospital shall be opened.

XVII. All requisitions for medicines and hospital supplies shall be made in writing, upon the Chairman of the Committee, by the physician in attendance, and for all other articles necessary for the proper management of these hospitals, a requisition in writing shall be made by the Steward.

XVIII. No patient shall be admitted into such hospitals, excepting upon an order signed by a member of the Board or the Health Officer. The rate of board to be paid by the patients shall be fixed by the Sanitary Committee.

#### Committee on Accounts.

XIX. All bills, being first certified as correct by a majority of the committee by whose order the bills were incurred, shall be presented to the Board, and by it referred for examination to the Committee on Accounts, previously to an order being passed for their payment.

### Committee on Office and Library.

XX. The Committee on Office shall have the charge and general superintendence of the building occupied as the Health Office, and of the fixtures, furniture and library belonging thereto, together with the superintendence of all employes. They shall direct to be procured all the necessary supplies for the use of the said office, and for the accommodation of the Board at its meetings. They shall have all the officers elected by the Board sworn or affirmed to perform faithfully the duties assigned to them and to keep private all business connected with the office.

### Committee on Burial Grounds and Registration.

XXI. It shall be the duty of the Committee on Burial Grounds and Registration to assist the Health Officer with their advice in the publication of the bills of mortality, and the annual statement of deaths, and generally to superintend the preparation and publication of the same in detail, weekly.

XXII. The Committee shall have charge of the registration department of the office, direct the necessary supplies, see that the Clerk carries out the rules and other requisitions of the Board, and report to the Board any delinquencies of duty that may occur in this department.

XXIII. They shall visit and examine all burial grounds, cemeteries, and vaults within the city, when referred to them by the Board as nuisances, and report such action thereon as may be necessary.

### Committee on Nuisances.

XXIV. It shall be the duty of the Committee on Nuisances to examine all nuisances complained of and referred to them by the Board, either directly, or after an examination and report by the Inspector, and to report to the Board what action may be necessary thereto.

XXV. Whenever the cost of removing a nuisance reported upon by the Inspector, or otherwise, shall exceed the sum of . . . . . dollars, the case shall be referred back to the Committee, who shall report to this Board, at the earliest practicable moment, the character of said nuisance and the probable cost of removing it; upon which report the Board shall take action and instruct the Health Officer in regard to the same.

### Health Officer.

XXVI. The health officer shall keep a cash book, in which entries shall be made of the receipts as they occur, and pay over to the Board monthly all moneys received by him.

XXVII. He shall furnish the Board, at its first meeting in every month a detailed statement of the receipts of the office during the preceding month.

XXVIII. He shall, whenever any bill is referred to him for collection, enter the same, together with a full description of the claim upon which the said bill is founded, upon a docket kept for that especial purpose, and note opposite to the side entry such action as may be taken, from time to time, in relation thereto.

XXIX. He shall, at the expiration of four months after date of said bills, turn over to the . . . . . for lien, all claims remaining unpaid, and furnish the . . . . . with a transcript of the same.

XXX. He shall, in all business referred to him, and requiring legal proceedings, prosecute the same, but take such proceedings only in conjunction with the . . . . . or his deputy.

XXXI. He shall, whenever this Board directs a nuisance to be removed under his supervision, abstain from employing any person who is, or may be, under prosecution for any violation of the health laws. The same prohibition is hereby extended to any other agent of the Board to whom such duty may be assigned.

XXXII. He shall award all contracts for abating nuisances within twenty-four (24) hours after the order of the Board has been placed in his hands, and shall impose a condition in said contracts that the work must be commenced within forty-eight (48) hours after acceptance, and prosecuted continuously to completion.

XXXIII. He shall, from time to time, furnish to the Nuisance Committee a list of the names of the licensed cleaners, with the number of their licenses, and shall also report to them at any time all information given him, or any knowledge he may have obtained respecting defalcations, breaches of faith, or violations of the law or rules on the part of licensed cleaners, or the men in their employ.

XXXIV. He shall keep a book, in which he shall record all cases of contagious or infectious diseases reported to the office, with the date of the report, the location and name of the patient, the disease under which he labors, and the name of the physician in attendance.

XXXV. He shall have the general superintendence of the registration department, and see that the clerk carries out the instructions of the Board, and shall report any delinquencies on his part to the Committee on Registration.

XXXVI. He shall publish . . . . . over his signature, the returns of deaths as made to the office, in such form and manner as shall be directed by the Board; and annually prepare for publication a report of the births, marriages, deaths and contagious diseases recorded in the office during the year, to be submitted to councils and the mayor (or to council and burgess) through the Board of Health.

### The Clerk.

XXXVII. The salary of the clerk shall be ..... per month. He shall transcribe the minutes taken by the secretary into a book provided for the purpose.

XXXVIII. He shall, also, keep copies of all agreements and letters made or written by order of the Board, and of such other documents as the Board may direct.

XXXIX. He shall copy, in a book to be provided for the purpose, all resolutions, not of a temporary nature, that may be hereafter passed by the Board, with marginal notes.

XL. He shall notify the chairman of all committees of the business referred to them by the Board. He shall also notify all elected officers of their election.

XLI. He shall grant licenses to clean privies, under the rules of the Board, when so directed, and for each license he shall receive the sum of ..... dollars, and he shall renew the said license from time to time, as the Board may direct, upon the payment of the like sum.

XLII. He shall grant orders for the admission of patients into the hospitals (he being first furnished with the usual certificate of a physician) upon satisfactory security being given to him for the payment of the board and medical attendance of the said patients.

XLIII. He shall furnish the health officer a true copy of all resolutions passed by the Board concerning the duties of said officer.

XLIV. He shall place in the hands of the health officer for execution all orders to abate nuisances, where the owners or agents have failed to comply with the notice of the Board, providing the cost of removing said nuisance shall not exceed the sum of ..... dollars.

XLV. He shall have the entire superintendence of the office, answer all questions appertaining to the business of the Board and office, and furnish the office committee with a list of such supplies as may be needed; keep in a book an account of all articles furnished to the health officer and the employes of the office; report to the committee on office any delinquency of duty on the part of those in the employ of the Board, preserve good order in the office, and perform such other services appropriate to the position as the Board may direct.

XLVI. It shall be his duty to issue permits to clean privy-wells, in accordance with the act of ....., and the rules of the Board relating thereto.

XLVII. He shall refuse permits to cleaners whose licenses have been suspended, or upon whom fines have been imposed for violating the regulations of the Board, until said suspension is revoked or fines are paid.

XLVIII. He shall issue permits for the removal of dead bodies from one cemetery to another, or from one grave or vault to another



in the same cemetery, within the bounds of the city, quarantine season excepted, unless by special order of the Board. In all cases, before issuing the permit, he shall require a certificate containing the name, age, cause of death, and date of the death of the deceased.

XLIX. He shall issue permits for the erection, establishment and continuance of slaughter houses, bone-boiling, and fat-rendering and all similar establishments, within or near the limits of this . . . . . as provided by the ordinance of this . . . . . and the regulations of the State Board of Health.

L. He shall keep a record of all moneys received by him in his official capacity, in a book provided for that purpose, and report the same to the health officer.

LI. He shall, during the absence of the health officer, discharge the duties pertaining to that office.

LII. He shall receive all complaints of nuisances, having the name and residence of the complainant thereto attached, and place them in the hands of the inspector for examination. He shall record the same, when returned by the inspector, in a book kept for the purpose, specifying the date, the location, the character of the nuisance, and the name of the inspector, and make out a duplicate notice of that served upon the owner or agent. He shall submit to the Board, at each stated meeting, for confirmation or otherwise, the action of the inspector upon complaints of nuisances, and shall report any neglect of duty upon the part of the inspector in making their examinations and returns. He shall notify committees and witnesses to attend meetings, whenever so directed by the chairman thereof. He shall append to all notices for removing nuisances that part of the law imposing a penalty for neglect or refusal to remove such nuisances.

LIII. He shall have the entire charge of all books and papers belonging to the registration department; he shall see that all entries are accurately made, and the books kept in good order and condition.

LIV. He shall examine carefully the returns of births, marriages, deaths, and contagious diseases, and should any omission or errors occur therein, it shall be his duty to notify the parties making said returns to make the necessary corrections, and any neglect or refusal on their part shall be reported to the Board through the committee on registration.

LV. He shall keep, in a book provided for the purpose, a record of the names and residences of physicians, practitioners of midwifery, clergymen, clerks of meetings, clerks of courts, justices of the peace, sextons, undertakers, and others required by law to make returns to the health office; and should any person or persons so required, when notified, neglect or refuse to call at the office and record their names and residences, he shall report the fact to the Board, in writing, through the committee on registration.



LVI. He shall fill up all permits for the removal of dead bodies from the city for interment, having first obtained the certificate of the attending physician or the coroner, accompanied by that of the undertaker, together with the approval of the health officer, whose signature shall in all cases be appended thereto.

LVII. He shall make out and deliver, under the approval of the health officer, all transcripts of births, marriages, deaths, or contagious diseases, applied for from the registration records, with the name of the health officer appended.

LVIII. He shall have charge of the books containing the blanks for birth, marriage, and death certificates, and deliver them, when applied for, to such persons as are required by law to make returns: Provided always, That the names and residences of the applicants are on record in the office, or shall be registered at the time of receiving the blanks. He shall also keep an account of all blanks delivered by him, together with the date of delivery and the name and residence of the receiver.

LIX. He shall assist the health officer in the preparation of his . . . . . statement of deaths and contagious diseases, and of his annual report of births, marriages, deaths and contagious diseases.

LX. He shall at all times during office hours give to lawyers, physicians and clergymen, access to the registration books, and allow them to take notes of the contents; and to all other persons desirous of examining into the merits of the system, he shall furnish every necessary facility.

LXI. For all permits to remove dead bodies from the city for interment, and for all certified transcripts from the registration record, there shall be a charge demanded of fifty cents, to be paid over to the health officer.

#### Inspector.

LXII. It shall be the duty of the inspector to have general supervision of garbage collection, and to report to the Board any neglect on the part of the contractors in fulfilling the terms of their contracts.

LXIII. He shall see that all special orders of the Board relating to collection of garbage are faithfully obeyed, and report to the Board any neglect of duty upon the part of the contractors.

#### Sanitary Policeman.

LXIV. It shall be his duty to examine and report upon all complaints of nuisances placed in his hands within twenty-four hours thereafter.

LXV. He shall, whenever any nuisance may be found, immediately serve a notice upon the owner or agent of the premises upon which such nuisances exist, to abate said nuisance. In the event of the

owner or agent not being found after diligent search, the notice shall be left upon the premises and the fact reported and entered upon the record.

LXVI. He shall, in making his returns, give an accurate description of the property or properties whereon the nuisance exists, together with the nature, character or cause of nuisance.

LXVII. He shall strictly follow the schedule of time allowed in service of notices for the abatement of nuisances, when not otherwise specified by resolution of the Board.

LXVIII. He shall, at the expiration of notice (Sundays and days set apart as holidays excepted), re-examine said nuisance and report what action has been taken in the premises.

LXIX. He shall, with all returns of non-compliance with notice (except in the case of privy wells), present an estimate of the probable expense of removing said nuisance, and also give the offset of all privy wells, taken by accurate measurement.

LXX. He shall serve the bills for removing nuisances upon the owners or agents of the premises on which such nuisances are situated, and if not found after careful inquiry, he shall leave the bills upon the premises.

LXXI. He shall carefully abstain from giving or causing to be given, to any privy cleaner or cleaners, their agents or others, any information respecting nuisances reported to the Board, or any complaint whatsoever, or respecting the action of the Board relative to a nuisance or nuisances. Such offense shall be considered a misdemeanor in office, and render the inspector so offending liable to immediate dismissal.

LXXII. He shall, whenever complaints are made and verified, of dead animals lying on private property, have them removed by burial or otherwise, under the direction of the health officer, provided the cost of removal of each animal does not exceed the sum of fifty cents.

LXXIII. He shall see that the streets are properly sprinkled with water before being swept or scraped, and that the gutters are properly and thoroughly washed down.

LXXIV. He shall superintend the application of disinfectants to the streets when directed by the Board.

LXXV. He shall see that the garbage and ashes are regularly and systematically collected, and that the street dirt, etc., is immediately removed after being collected together; that all garbage and ash carts are properly covered, and that the rules governing the collection and removal of garbage and ashes are rigidly adhered to.

LXXVI. He shall note all cases in which ashes, garbage and waste material of every description is thrown into the streets, and where building material, accumulations of earth, stones, etc., have been left upon the streets in the violation of law, and notify the parties committing the offense.

LXXVII. He shall report all curbing, gutters and streets out of repair, when their condition interferes with the work of street cleaning, also defective drainage and imperfect inlets to sewers.

LXXVIII. He shall notify the contractors of any work in their respective districts that requires attention, or of any neglect on their part, and if, after such notice, the contractors, or any of them, shall not immediately remedy the complaint, he shall report the fact immediately to the Board.

LXXIX. He shall perform such other duties connected with the inspection of streets as the Board shall from time to time direct.

LXXX. The following schedule of time shall be allowed in service of notice upon parties to abate nuisances, when not otherwise specified by resolution of the Board, to wit:

To remove dead animals, slaughter-house offal, and other matter in a state of decomposition, and to cleanse and disinfect infected houses, twenty-four (24) hours.

To cleanse overflowing and leaky privy wells and water closets, to disinfect foul wells, and to cleanse slaughter houses, manure pits during quarantine season, three (3) days.

To cleanse foul privy wells and manure pits, filthy houses, cellars, yards, alleys, and vacant lots, to repair and regulate surface drainage, and leaky and defective drain pipes, five (5) days.

To remove hogs and pens, to cleanse slaughter houses and cow-stables, and to fill up or drain ponds of stagnant water, ten (10) days.

#### Removing Nuisances.

LXXXI. Whenever the cost of removing any nuisance (privy wells excepted) shall exceed the sum of . . . . . dollars, the health officer shall invite proposals, and the bids shall be opened in the presence of the committee on nuisances and awarded to the lowest responsible bidder.

LXXXII. The contractor shall strictly adhere to the stipulations and terms of the contract. No extra allowances will be granted upon bills for work done, or materials furnished, unless specially ordered by the Board.

LXXXIII. The contractor shall not proceed in executing his contract if he shall find that the owners have, in the meantime, commenced operations, or partially abated the nuisance. He shall notify the health officer of the fact, and await further orders.

LXXXIV. The contractor shall strictly conform to the lines and levels furnished by the surveyor appointed by the Board, for grading, paving, and laying drain pipe.

#### Expense of Removing Nuisances.

LXXXV. All bids submitted to the board for removing nuisances,

not exceeding . . . . . dollars, shall be itemized and a charge made for each separate item. A charge shall be made for every incidental expense incurred. The surveyor shall furnish the Board with bills as per measurements for all contracts wherein he is required to give the lines and levels, and make out bills divided proportionately against the properties chargeable with the cost of abating said nuisance. The price to be charged by this Board for cleaning privy wells shall be . . . . . per cubic foot for wells measuring less than one hundred cubic feet, and . . . . . cents per cubic foot for wells one hundred cubic feet and over.

LXXXVI. In all cases, until otherwise ordered, where nuisances are directed to be removed forthwith, if the same are not removed within twenty-four hours, the health officer is hereby directed to have the same done at the expense of the owner, etc., etc.

LXXXVII. In all cases of nuisances to be removed by the owners of property, who have been notified to that effect by this Board, it shall be understood that should he or they commence the removal within the time prescribed in the notice, the Board will not interfere.

#### Miscellaneous.

LXXXVIII. No communication shall be received by the Board from its officers or servants, or from any other person whatever, unless the same be in writing and directed to the Board, or through the President or Secretary thereof officially.

LXXXIX. When any nuisance is referred to a committee, with power to act thereon, the said committee shall report in writing what action they have taken in relation to it.

XC. Each standing committee shall direct all expenditures that may be necessary to carry out the object of its appointment, provided the same shall not exceed . . . . . dollars, and no contract shall be made for any amount over that sum, unless first approved and directed by the Board.

XCI. The minutes of all committees shall be read at any meeting of the Board, upon the call of a member.

XCII. Police officers, constables, and watchmen are enjoined, and citizens are respectfully desired, to give information to the Board of Health of any violation of the health laws, or of the rules and regulations of the Board, so that the sanitary measures adopted by the latter to ensure the cleanliness and health of the city, may be fully carried out, and all offenders promptly punished.

#### Licensed Privy Cleaners.

XCIII. Applications for licenses to clean privy wells, vaults, sinks, or cess-pools must state the name of the applicant, his residence and

place of business, the names of the sureties proposed to be given on his bond, their occupation and places of residence, the number of air-tight tanks, pumps, trucks, horses, and other appliances to be employed by said applicant, and the accommodations he has for keeping his apparatus when not in use. They must also state that the applicant is the bona fide owner of the number of the apparatus, horses, etc., named, and that he is not in collusion or combination with any person or persons to deceive and defraud the Board.

XCIV. Upon every such application being referred to the health officer, he shall make the necessary inquiries and examinations and report to the Board as early as practicable; and upon his report that the applicant is of good moral character and bona fide the owner of the number of apparatus, horses, etc., stated by him, that the tanks or carts are properly and securely constructed, and that the applicant has the necessary accommodations for keeping his apparatus under cover, or from public view when not in use, the Board may, if fully satisfied with his bond, and as to the fulfillment of the requirements of the laws and of the rules of the Board, direct the clerk to issue a license (or renewal thereof), to him, in conformity to the laws and rules governing the subjects; which license shall bear date of the day on which it is ordered to be issued; and every issue of license and renewal thereof shall be reported to the Board at the next meeting thereafter.

XCV. Whenever a license or renewal thereof is granted, the health officer shall register in a book the name, residence, and place of business of the party so licensed, the number of his license, the number of tanks, carts, pumps, trucks, horses, etc., to be employed by him, the names, residences, and occupations of his sureties: Provided, however, That before any license or renewal thereof is furnished by the clerk, the health officer shall certify to him that each and every tank, truck, or cart has permanently painted on both sides thereof the proper name of the licensed party, and the number of his license plainly and intelligibly displayed, which names and number shall always be kept clean and exposed to public view when the tanks, etc., are in use, and subject to the inspection of any police officer or citizen at all times.

XCVI. The period for the termination of licenses for cleaning privy wells, vaults, sinks, etc., shall be the ..... day of ..... in each and every year; after which date, however, licenses may be granted upon the full payment of ..... dollars by the applicant, and his compliance with the law and the rules of the Board.

XCVII. A permit for emptying or cleaning a privy well, vault, sink, or cess-pool shall be issued in the name of the licensed party applying for the same, stating therein the location of the premises, and the name of the owner, agent or occupant thereof so employing him. It shall specify the day for the removing of the contents, but it may be

extended for two days longer, if, in the judgment of the clerk, the work was deferred or postponed in consequence of some unavoidable circumstance. Every permit shall be returned to the health office on the day succeeding its termination; and, if not so returned, the clerk shall have authority to refuse any further permits to the delinquent cleaner until the rule is complied with, and, if not returned within three days after its termination, he shall report the same to the Board, who shall take such action thereon as may be deemed proper.

XCVIII. No privy well, vault, sink or cess-pool shall be cleaned and the contents thereof removed or transported after sunset or before sunrise in any day, unless in an air-tight tank.

XCIX. Every person, persons or company licensed to clean privy wells, sinks, etc., shall have a pit for depositing the contents of said wells, sinks, etc. (the location to be approved by the Board), and said pit shall not be located within two hundred yards of any public road, lane or street and shall be screened from public view.

C. It shall be deemed unlawful for any licensed cleaner to make any contract or engagement for the cleaning of a privy well or sink, except with the owner, agent or occupant of the premises upon or at which the work is to be done; and if at any time it shall be ascertained that a cleaner is violating this rule, the clerk shall refuse him a permit, and the Board may revoke his license.

CI. Any violation of law, or of the rules of the Board, will, in addition to the punishment imposed by acts of the Legislature, subject the offender to a forfeiture of his license or a suspension thereof, at the option of the Board.

CII. Every party licensed shall receive with his license a printed copy of the rules and extracts of laws on the subject, so that he cannot set up the plea of ignorance of their existence.

CIII. Permits shall be submitted for examination at the place where the work is being done, when required by inspectors, police, and other properly qualified officers.

### Hospitals for Contagious Diseases.

#### The Physician in Charge.\*

CIV. The physician in charge shall visit the hospital daily, or oftener, if the circumstances of the patients shall require it.

CV. He shall have entire direction of the medical treatment of the patients and the general direction and management of the hospital, subject to such rules and regulations as the sanitary committee may, from time to time, impose.

CVI. All requisitions for medicine and hospital supplies shall be made by the physician in charge in writing, upon the chairman of the

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\*The Health Officer, if a physician, shall be eligible to the position of Physician in charge.



sanitary committee; and for all other articles necessary for the proper conducting of the institution, a requisition in the same manner shall be made by the steward.

CVII. The physician in charge shall have the control of the nurses, and shall promptly report to the sanitary committee any irregularity committed by them, and shall suspend them, if necessary, and report the facts to the sanitary committee for action thereon.

CVIII. He shall record, in a book to be provided for the purpose, the name of every patient with the date of admission, age, sex, color, nativity, occupation, disease, and the date of discharge or death, as the case may be, and such other matters as he, or the sanitary committee, may consider important or necessary.

CIX. He shall make a weekly report to the sanitary committee or board of health, stating the number of patients admitted since the last report, with the disease, recoveries, deaths, and such other information as he, or the sanitary committee, may think requisite.

CX. He shall, also, make a monthly report to the sanitary committee or the Board of Health, which shall contain a summary of the weekly reports, and such other matter as he, or the sanitary committee, may consider requisite.

#### The Steward.

CXI. Before entering upon the performance of his duties, the steward shall enter into a bond with security, to be approved by the Board, in the sum of ..... dollars, conditioned for the faithful performance of his duties. He shall have no right of property in or to anything at the hospital, and, further, he shall deliver over to his successor in office, or such other person as may be designated by the Board, all property, goods, chattels, or produce belonging to or purchased by the Board, as the same are or may be confided in his care, in the same condition as they are or may be at such times (reasonable use, wear and tear, fire, or unavoidable injury excepted).

CXII. The steward shall reside at the hospital and be allowed such apartments in the building as the sanitary committee shall designate.

CXII. He shall not use or allow to be used, the horses, vehicles, or other property of the Board, except for the legitimate purposes of the hospital, or by permission of the sanitary committee.

CXIV. The buildings, grounds and property of the Board at the hospital shall be under the general charge of the steward, subject to such general rules and regulations as the sanitary committee may from time to time impose.

CXV. He shall require all persons connected with the hospital to perform such duties as may be assigned them; and in case of their failure, refusal or neglect to perform such duties, he shall suspend them from all duty, and report the facts to the sanitary committee for action thereon.

CXVI. He shall require that the hospital shall at all times be kept scrupulously clean; that the clothing and bedding of patients shall be frequently changed, and thorough ventilation maintained; and to accomplish these ends, he shall have authority, subject to the approval of the physician in charge, to prescribe the duties of all nurses and attendants, and indicate the time and manner in which such duties shall be performed.

CXVII. He shall take charge of and inventory the effects of all patients that may be admitted into the hospital and return them, after having been disinfected, to the owner when discharged; or in the event of the decease, a report of such effects shall be made to the sanitary committee.

CXVIII. He shall superintend the work of disinfecting clothing, beds, bedding, etc., and see that it is efficiently done, and may enforce the rule that every patient, immediately before leaving the hospital, must take a bath and be supplied with non-infected clothing.

CXIX. The steward shall make an inventory provided for the purposes, of all articles sent to the hospital for purification, in which shall be noted the premises from which removed, the condition in which received, the disposition made of them when received and when returned. All such articles must be purified as soon as possible after being received at the hospital.

CXX. Great discretion and judgment must be exercised by the physician in charge and the steward in permitting persons to visit the hospital; and in no case shall visits to the wards be allowed, unless under circumstances of a very special nature.

CXXI. The steward shall have authority to select such individuals as he may think proper to take charge of the various departments (bakery, laundry, etc.), and shall report such action to the sanitary committee.

CXXII. He shall invariably treat the patients with kindness and civility, and never suffer any degree of cruelty, insolence, neglect, or unkindness on the part of the nurses or servants towards them to pass unnoticed. He shall also see that the nurses and attendants treat the sick with care and humanity, that the diet directed by the physician in charge is properly prepared and supplied, and generally that the orders of the physician in relation to the treatment of the sick and the management of the wards and departments more especially under his charge, are fully and regularly exercised.

CXXIII. He shall in no instance permit intoxicating liquors or any provisions to be given to the patients, except by direction of the physician in charge.

CXXIV. He shall see that all fires and lights are extinguished in every apartment of the premises under his control before 10 o'clock at night, excepting such as may be absolutely necessary, and these he shall leave under proper care.



CXXV. Whenever a patient dies in the hospital, the steward shall have his or her body decently interred in the burial ground appointed by the Board of health; see that such of his or her clothing as require it, are, within twenty-four hours after the decease of the patient, properly washed, disinfected, ironed, and put away or destroyed when so directed by the physician.

CXXVI. So soon as a patient is discharged from, or dies at, the hospital, the steward shall make out and transmit forthwith to the Board a bill for his or her board and attendance, at the rate of ..... for each day the said patient has remained at the hospital, counting the days of entrance and departure each one day; and in the case of his or her death an additional sum of ..... dollars for burial expenses. He shall also be required to make a similar record of patients who are unable to pay their board, and transmit a copy to the Board at the end of each quarter.

CXXVII. He shall see that the nurses and other employes are suitably provided with board, lodging and washing.

CXXVIII. He shall be required to communicate in writing, to the Board or sanitary committee, whatever alterations, improvements or observations he may consider will have a tendency to promote the interests of the Board, preserve the grounds and property at the hospital, or increase the comforts of those under his care.

CXXIX. On the first day of May, annually, if the hospital is a permanent one, the Steward shall take an inventory of all the household goods and other property belonging to the hospital, and shall record said inventory in a book specially provided for the purpose, and shall present a copy of the same to the sanitary committee.

CXXX. He shall make out and transmit to the sanitary committee, at the close of each month, the pay-roll of all nurses and attendants employed at the hospital.

CXXXI. No patient shall be employed in the work of the house without the consent of the sanitary committee.

#### The Matron.

CXXXII. The matron shall take care that each patient has the diet prescribed, superintend its preparation, and have it served at regular stated hours.

CXXXIII. She shall have charge of the bedding, bed clothing, and such wearing apparel as may be provided for the patients; shall have general supervision of the laundry, and shall see that cleanliness is maintained throughout the hospital.

CXXXIV. She shall have charge of the table for the steward and other officers, and for the employes of the hospital, and in conjunction with the steward, shall have control of the servants and nurses.

**Regulations to be Observed in Removing Kitchen Garbage and Offal.**

**CXXXV.** No person shall engage in the business of collecting and transporting kitchen garbage and offal in the ..... of ..... (except the persons acting under the direction of the Board of Health) without having obtained a permit from the health officer authorizing such person to engage in the business, in conformity with the rules and regulations of the said Board of Health.

**CXXXVI.** All carts and other vehicles for removing kitchen garbage and offal shall be so constructed as to be water-tight, and securely covered on the top. They shall have permanently painted in white letters, upon both sides thereof, the proper name of the contractor, and the number of his district, which name and number shall be plainly and intelligibly displayed, and always kept clean and exposed to public view when the carts are in use, and at all times subject to the inspection of any police officer or citizen. All such carts and vehicles shall always be kept clean, and shall be so loaded and driven that none of their contents shall fall or spill therefrom.

**CXXXVII.** Owners, tenants and occupants of houses shall provide suitable receptacles (not larger than a half barrel) for holding kitchen garbage and offal, and shall deliver the same promptly when called for by the properly authorized persons. No boxes, buckets or other receptacles used for the purposes aforesaid shall be placed upon any sidewalk or in any public place whatever.

**CXXXVIII.** Contractors shall call regularly at all dwellings, and all other buildings, whether the means of access be through alleys, courts, or from streets or public highways, and remove promptly, and in as cleanly a manner as possible, all kitchen garbage and offal that may be offered, and return the receptacles to the house or yards from which received. They shall also collect and remove all garbage and offal which by accident or otherwise may have been put upon the side walks, courts, or alleys by residents, occupants, or persons having charge of dwellings and all other buildings.

**CXXXIX.** The carts or vehicles shall be sent at a regular hour through every street, lane or highway, and adequate notice shall be given, by the ringing of a bell, to the occupants of all buildings they are about to approach for the removal of kitchen garbage and offal.

**CXL.** No person engaged in collecting and in transporting kitchen garbage and offal shall do, or permit to be done, anything in connection therewith that shall be needlessly offensive or filthy in relation to any person, place, building, premises or highway.

**CXLI.** No deposit of kitchen garbage shall be made within the built-up portions of the ..... of ....., or upon any lot or open space lying within any portions thereof, or upon any wharf, or upon any boat or vessel lying at any wharf, except by a special permit from the Board of Health.

**CXLII.** Garbage and offal shall not be kept in the same vessel nor removed in the same cart or vehicle, with ashes and rubbish. It shall be removed . . . . . from the 1st of June to the 1st of November, and not less than . . . . . times a week in the remaining months in each year.

### Rules of Order.

**CXLIII.** The order of business shall be as follows:

1. A quorum (i. e., three members) being present, the President shall take the chair and call the board to order.
2. The minutes of the last meeting shall be read, and, if necessary, corrected and adopted.
3. Communications may be presented and disposed of.
4. Reports of committees may be made and considered.
5. Resolutions may be offered and discussed.

**CXLIV.** When a member is about to speak in debate, or to communicate any matter to the Board, he shall rise and respectfully address himself to "Mr. President," confining his remarks to the subject before the Board.

**CXLV.** Members desiring to be heard upon any motion or resolution before the Board shall not be allowed to speak more than five minutes on any one subject; nor shall they speak oftener than twice on any motion or resolution.

**CXLVI.** The President shall not speak on any question before the Board while in the chair; should he desire to engage in debate, he must call another member to the chair.

**CXLVII.** If any member in debate transgresses the rules of the Board, the President shall, or any member may, through the President, call him to order; the member so called shall immediately sit down, unless permitted to explain.

**CXLVIII.** On question of order there shall be no debate, except on an appeal from the decision of the President, sustained by two members.

**CXLIX.** No member, when speaking, shall be interrupted, unless by a call to order, or by a member to explain, or by a motion for the previous question.

**CL.** No member of the Board shall leave his seat during the session of the Board, unless by permission of the chair, and no member shall leave the room whilst another is on the floor.

**CLI.** Every motion made and seconded, shall be distinctly announced from the chair before any debate on it can take place, and, when the discussion is closed, the President shall put the question in the following form: "As many as are in favor of the motion, say aye;" and, after the affirmative is expressed, he shall reverse the question thus: "As many as are of the contrary opinion, say no." But the

President, or any member, may call for a division of the Board, when the President shall again put the question distinctly in the following manner: "As many as are in the affirmative will rise;" and when he has announced the number in the affirmative, he shall put the opposite side of the question: "As many as are in the negative will rise." Two members may require the yeas and nays to any question, and have them entered on the minutes; but the President shall always vote last.

CLII. A motion shall be committed to writing, at the request of any member..

CLIII. A motion may be withdrawn by the mover and seconded before amendment or decision, and if withdrawn, the proceedings had thereon shall not appear on the minutes.

CLIV. A member may call for a division of the question, if it comprehends distinct questions.

CLV. No business regularly before the Board shall be interrupted, except by motion for adjournment, for the previous question, viz: "Shall the main question be now put?" and which shall be decided without debate, or for postponement, for commitment, or for amendment.

CLVI. A motion for the previous question must be sustained by at least two members, and shall be decided without debate.

CLVII. A motion for postponement shall preclude commitment; that for commitment shall preclude amendment or decision on the original subject.

CLVIII. No motion for reconsideration shall be received, unless made and seconded by members who voted in the majority, nor unless offered within two stated meetings of the one at which the decision was had on the original question.

CLIX. When a blank is to be filled, the question shall be taken on the largest sum, greatest number, and remotest day.

CLX. Corrections to the minutes may be moved by any member at the ensuing meeting, provided it shall be shown that the said corrections are required in order to render the minutes an accurate detail of the business transacted at the meeting.

CLXI. When cases occur not provided for in the above rules, the practice and rules laid down in Robert's Manual shall govern.

CLXII. No rule shall be suspended, or altered, except by a vote of four members, unless the same shall have been proposed at a previous stated meeting.

## CIRCULAR NO. 52.

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**Hygienic Hints for Barbers and Hair-Dressers.**

Inasmuch as there is no doubt that certain diseases of the skin and scalp, as well as some of the more common contagious diseases are often propagated by the instruments and hands of barbers and hair-dressers, the State Board of Health of Pennsylvania has prepared this circular, and suggests that the hints here given be carefully studied by barbers and hair-dressers, with a view of preventing disease from spreading through any neglect on their part.

**I.**

No person suffering from any disease of the skin, scalp or hair should act as a barber, nor should any one suffering from consumption or any disease commonly known as contagious serve in this capacity. When diphtheria, scarlet fever, small-pox, measles or other contagious diseases occur in the family of a barber, he should not nurse the patients, nor in any way come in contact with them, but should leave their care to members of the family who do not enter his shop or place of business and temporarily change his residence.

**II.**

The place of business (the shop or parlor) should be kept scrupulously clean, as should also all of the chairs, razors, clippers, brushes, towels, and all other articles or instruments used in the business. Towels should be carefully washed and then rinsed to remove the odor of soap.

**III.**

Persons suffering from any disease of the skin, scalp or hair, or from consumption, or convalescent from small-pox, scarlet fever, diphtheria or other contagious disease should not visit any barber shop

or parlor, but should be attended by the barber or hair-dresser at their own homes. All instruments used on sick patients should be carefully disinfected after such use.

#### IV.

Customers should be encouraged to own their own instruments (razors, soap, brushes, etc.), and in the case of those suffering from diseases of the skin, scalp or hair, this should be compulsory. For operations on a dead body, the barber should have instruments used only for this purpose.

#### V.

##### Disinfection of Instruments.

Razors and clippers may be disinfected by boiling for five or ten minutes in soap water or in water containing a little carbonate of potassium. For this purpose they should be laid in an enamelled or galvanized dish, completely covered by the water. After boiling they should be carefully dried.

Steel instruments boiled in this solution are not liable to rust.

Hair brushes, combs and straps may be disinfected by placing them in a small closet or case which closes hermetically (is air-tight), in which is kept a saucer constantly filled with a solution of formalin. It is recommended that all instruments be laid on racks or trays in this closet after using. If this is done, every customer can have a thoroughly disinfected instrument for use in his case. Brushes and combs will need cleaning with bran or clay in hot water at intervals.

Shaving brushes may be disinfected by being placed in boiling water for five minutes before using, or, better still, the brush may be entirely dispensed with and a puff of cotton used, which can be destroyed after one using.

Before passing from one customer to another, the barber or hair-dresser should wash his hands thoroughly. He should use warm water and carbolic soap, or one containing mercuric chloride.

The powder puff so constantly used should be replaced by a ball of wadding, or better by a powder blower. The ball of cotton should be thrown away after one using.

The lump of alum used to stop the flow of blood should be broken into small pieces, and after using one of these on a customer, it should be thrown away and not used a second time. Some prefer the burnt or calcined alum, applied on cotton, which can be thrown away after one using.

Only strictly clean linen, towels, wrappers, etc., should be used for each customer. If a freshly laundered wrapper cannot be supplied to each customer, a clean towel should be used in place of the wrapper.

Vaseline and wax should be used carefully, so as not to pass disease from person to person. The hair-dresser should remove vaseline from the vessel containing it with a spatula or spoon, and not by inserting his possibly contaminated fingers into the vessel. Each person should have his own wax.

The barber should not employ sponges in his work, nor should they ever be seen in shaving or hair dressing establishments. This is because they cannot be cleansed as a towel or wash rag may be. In their place, a towel should be employed.

## VI.

In order to cleanse the floor of the establishment, it should be sprinkled with dampened saw-dust or wet tea leaves, and then carefully swept, in order that as little dust as possible may be raised. The sweepings should be burnt every evening.

## VII.

The shop or parlor should be thoroughly ventilated before the day's work is begun, and some arrangement for continuous ventilation should exist throughout the day.

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### CIRCULAR NO. 53.

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#### Precautions Against the Plague.

A plague is a wide-spread, virulent, epidemic disease; a pest or pestilence.

One disease of this nature, however, is so pre-eminent above all others in point of malignity, destructiveness and horror that by common consent it has obtained the designation of "The Plague."

#### History.

The word signifies "stroke" and is a survival in our language of the belief of a superstitious age that an epidemic was the "stroke of



God," the conscious vengeance of an angry Deity, thus making the Almighty responsible for the inevitable results of our infractions of the simplest laws of nature, or, as has been well phrased, "flaunting our filth in the face of Diety." It has also been denominated the "Oriental Plague," because it has always originated in the East; the "Egyptian Plague," because for a long period, comprising the last century and the early part of the present, it was never absent from Egypt; the "Levantine Plague," because it has prevailed in all the cities of the eastern end of the Mediterranean sea; and the "Bubonic Plague," because one of its marked characteristics is the appearance of glandular swellings or buboes in various parts of the bodies of its victims. Under the name of the "Black Death" it is estimated in the course of five years, about the middle of the fourteenth century, to have carried off 25,000,000 people, or one-fourth of the entire population of Europe, London, Marseilles, Toulon, Florence, Nimegue, Transylvania, Venice, Lyons, Paris, Avignon, Moscow, all have their fearful records of its devastating horrors. With the march of civilization and the adoption of personal, domestic and municipal hygiene, it has, however, been crowded back into the domains of the filth-loving Asiatics with whom it originated, having last invaded Europe on the lower Volga, in Russia, nineteen years ago.

#### The Present Outbreak.

In certain regions in China, and in the Valley of the Euphrates, it has never ceased to exist. Since 1873 it has constantly prevailed to a greater or less extent in the province of Yunnan, China, and for more than twenty years has been present in the city of Pahkoi. In February, 1894, it showed itself in the city of Canton, spreading with such rapidity that in the space of three months the number of deaths ran up into the tens of thousands. By the month of May it had reached Hong Kong, ninety miles distant. It is from the careful and intelligent report of James A. Lowson, M. B., medical officer in charge of the Epidemic Hospital of that city, that we gain our definite knowledge of the disease as it appears during the present outbreak. Previously to this the only exhaustive and scientific study of this disease which had been made was the report of a committee of the Royal Academy of Medicine of France, made in the year 1846. This committee devoted two years to its work, and while it carefully sifted such histories as were available of the various European outbreaks in past centuries, it derived the greater part of its information from medical and official eye witnesses of the great epidemic in Egypt in 1835. Making allowance for the advances made in our knowledge of the causation of epidemic diseases during the intervening half century, we find a striking correspondence in the results. It is interesting to note that even at that day a member of the Academy,



Hosquet by name, during the discussion which followed the reading of the report, announced his belief that the cause of the disease was a germ, and formulated the statement, remarkable in the light of modern discovery, that "every contagious disease creates a germ capable of reproducing itself." That which in his day was theory, and for announcing which he was ridiculed, has to-day become fact through the researches of a distinguished scientist, a native of a country at that time almost unknown, but since thrown open to the light of civilization by the action of the navy of the United States, the Japanese physician and bacteriologist, Kitasato, to whom belongs the distinguished honor of having first discovered the bacillus of this dread disease, a discovery second only in importance to that of the germ of Asiatic cholera by the immortal Koch.

From Hong Kong the disease was conveyed to India, evidently by ships, making its appearance in Bombay in August, 1896, but its presence was not officially acknowledged until the physicians had recognized it for a month. Much valuable time was therefore lost. In that city it raged for months with a virulence that was truly frightful. The facts of the Bombay visitation bear out in a very striking manner the history of the plague's ravages in the Middle Ages, when its victims were largely among the indigent and ill-fed classes. The outbreak in Bombay first occurred in one of the most squalid quarters of the town, and with certain exceptions it spared the wealthier class. Englishmen, whether through a transmitted immunity which they have shared with the nations of Europe since 1841, or from a higher standard of living or from whatever cause, enjoyed a freedom from attack so remarkable as to render isolated cases among them quite phenomenal. While the mortality from all causes ran up to sixty-three per thousand at the beginning of November, and again to sixty-three per thousand in the third week of that month, the general death rate among the well-fed Parsees was just under thirty, among the even better fed Europeans twenty-four, and among the amply fed European community only eighteen per thousand. But among the filthy low caste natives the mortality was appalling. For weeks the deaths from plague alone numbered more than two hundred a day. Huge flocks of vultures hovered all day long over the "towers of silence" where the bodies of the Parsees are laid out on an iron grating to be torn to pieces by these unclean birds. In the Hindu burying ground graves could not be dug fast enough, and the Mohammedan cemetery is described as having presented the appearance of a battlefield. Up to the month of April, 1899, the deaths reported to the authorities as having occurred from this epidemic in India were 250,000. Many were undoubtedly concealed.

### Nature of the Disease.

The disease may be briefly described as an acute febrile infectious disease, characterized by a tendency to buboes or suppurating lymphatic glands and petchial patches in various parts of the body, marked cerebral and vascular disturbances and intense prostration.

### Cause.

It is due to a specific germ, a bacillus or short pod with rounded ends, which has been found in the blood and glands. Infection takes place through the lungs, digestive canal and wounds or abrasions of the skin. The death rate is higher than that of any other known disease. About eighty out of every hundred stricken die, and the course of the attack is swift as well as sure and fatal, death usually occurring on the second day. If the patient is going to survive, symptoms of improvement begin to show themselves between the sixth and tenth days. No treatment has yet had any effect in reducing its mortality. Much is hoped, however, from an anti-toxic serum similar to that used in diphtheria with such happy results.

One very curious feature of its approach is that it attacks rats before it attacks human beings. These creatures come out of their holes to die, evidently in a state of delirium, as indicated by their losing all fear of man. This would lead to the supposition that the germ grows in the earth and spreads along the surface and is not as a rule communicated through the air. This theory is also supported by the fact that certain localities become infected while others not far distant remain entirely free from infection. In this respect there is a striking resemblance between the mode of propagation of plague and yellow fever. This latter disease will sometimes prevail on one side of a street while those living on the other side are entirely free from attacks. All the domestic animals are liable to this infection. Dogs, rats, hogs, buffalo and other horned cattle and domestic fowls have all been known to die of it in great numbers. As all of these creatures browse or feed upon the ground, this fact gives additional support to the theory advanced.

### Mode of Communication.

The conclusion which we arrive at then is that this affection is not contagious in the strict sense of the term, not conveyed from person to person, but infectious, clinging to places and things, the earth, houses, ships, furniture, bedding and clothing and developing its deadly qualities in such situations outside of the human body. The question may naturally be asked, Is not this subject rather one of curious interest than one of practical importance? Why waste our time considering a disease which has never been seen in this country

and is never likely to be? To this we reply that there was a time when neither scarlet fever nor diphtheria had ever been seen in this country, and that within the present century. It is well known that the early settlers brought small-pox to this virgin land among the other blessings of civilization, and that under its blighting influence the aborigines, if they were such, melted away like snow before the sun. Plague is readily conveyed in ships, and when once the soil of a country has had the seed sown in it, the weed becomes difficult to eradicate. The following incident shows that this danger is a real and not a fancied one:

On the 16th of July, 1897, the British ship *Annie Maud*, arrived at the United States Quarantine Station, Angel Island, California, having lost one of her crew from bubonic plague during the passage from Calcutta. Two more of the crew were seized with the disease but recovered. Under the careful system of disinfection pursued by the authorities, the infection was destroyed, but the incident is significant as showing with what ease the disease may be brought to our shores. We cannot rely on climate to protect us from its invasion, as during the present century even it has been seen as far north in Europe as Moscow and points in Norway and Sweden.

On the 29th of October, 1898, two of the crew of the French bark, *Duchess Ann*, from Hong Kong to San Francisco, died of this disease while at sea.

Cases have more recently occurred at Alexandria. It has again broken out in certain cities of India. Deaths have occurred in the city of Vienna, in consequence of the careless handling of germs brought to that city for purposes of experimentation, thus proving at once the absolute truth of the germ theory and the virulence of the germ.

It has now traveled the entire length of the Mediterranean, traversing the Suez canal, and prevails in the city of Oporto, Portugal, on the western shore of the Atlantic Ocean. It is therefore approaching us from two opposite directions, and we must maintain a careful watch both on the Atlantic and the Pacific seabords. The new responsibilities which we have assumed in the Asiatic Archipelago, bringing us into constant and intimate intercourse with Oriental peoples, will inevitably result in transporting occasional cases of the disease and much infected material to our ports. It is the part of wisdom therefore to be prepared for such emergencies.

Impressed with a sense of the responsibilities resting upon it, the State Board of Health, therefore, suggests the following:

## PRECAUTIONS.

### Precautions to be Adopted by Health Authorities in advance.

#### Emergency Hospitals.

Every city and borough should have a spot selected whereon an emergency hospital or camp may be placed, in case of a visitation of this or any other infectious disease of a dangerous character. The circular of this Board on Emergency Hospitals gives full directions for their establishment and management, and is in the hands of every health officer in the State. It would be superfluous, therefore, to repeat them here. It may merely be suggested that patients do well in tents, and the latter can be immediately burned when vacated.

Mails from infected places should be carefully disinfected.

#### Cleaning Streets and Premises.

Nothing is better established than that this germ develops rapidly in, and clings persistently to filth-saturated soils and objects.

The dry germ may possibly be carried short distances not to exceed a hundred and fifty yards, by high winds. As a rule it travels with the prevailing wind. The first step to be taken, therefore, both by municipalities and by householders, is to remove all accumulations of filth and refuse from the neighborhood of dwellings, and to drain or fill up all damp, swampy grounds. House to house inspection should be instituted. Cellars should be carefully cleaned and whitewashed. Fences and outhouses should also be whitewashed. All gutters and alleys should be flushed, deodorized and graded so that stagnant water will not collect in them. Privies and cess-pools should be cleaned and disinfected. Pig pens should be constructed with tight, raised floors and no filth should be allowed to accumulate under them.

Chloride of lime, quick lime or copperas should be strewed over the ground from which filth has been removed, and in damp places. With these precautions there need be little fear of the spread of this infection.

#### "Anti-Bubonic Serum."

The researches of Yersin and Haffkins have conclusively proved the value, both protective and remedial, especially the former, of inoculations with anti-bubonic serum. The health authorities of all large cities, especially of those on the sea-board should provide themselves with a supply of this serum in advance.

### Precautions to be Adopted by Physicians.

As the extinction of the first spark will prevent a conflagration, so the discovery and isolation of the first case of a communicable disease will prevent an epidemic. But, in order to discover a disease, the physician must be able to recognize it.

It therefore becomes the manifest duty, first, of all physicians connected with quarantine stations, or with boards of health, and secondly, of all physicians residing in seaport towns to make a careful study of the symptoms of this disease. It should be borne in mind that the Pestis Minor or Lesser Plague, a comparatively mild affection characterized by buboes (swollen glands) and mild fever, lasting from one to two weeks, often precedes the Pestis Major or Greater or True Plague, apparently developing into it. 'This process of development may take months for its completion. Hence any such case should arouse suspicion and should at once be quarantined or reported to the authorities. There is reason to suppose that cases of Pestis Minor have been for some time past lurking in some of the principal cities of the Mediterranean.

### Incubation.

The intervals between the reception of the poison and the development of the first symptoms is comparatively brief—from two or three days to a week. A detention period of eight days is therefore necessary for suspects.

### Symptoms.

**First Stage** (not always present). Headache, pains in the limbs, general weariness and discomfort, face pale, but eyes somewhat blood-shot, face expressionless or anxious and mind dull. Sometimes vomiting. Duration not more than twenty-four hours.

**Second Stage.** High fever, temperature from 102 degrees to 107 degrees Fahrenheit, pulse rapid, from 90 to 130. Slight chilliness but no severe chill. Maximum temperature usually reached in from twenty-four to thirty-six hours. Falls gradually unless there are complications. Constipation present. Apathy, delirium, coma or convulsions are the varying indications of brain disturbance which may be met. The pulse usually passes through four stages—first, full and bounding; second, dicrotic (double); third, anacrotic (repeated in the line of ascent); fourth, failure. The blood flows very easily, the corpuscles crenating readily, and not tending to form rouleaux.

The bubo can usually be discovered about twenty-four hours after the onset of the fever. The location in order of frequency is inguinal, femoral (groin), axillary (armpit) and cervical (neck). There is usually sharp pain in the swelling. The size varies from that of an almond

PLAGUE AT HONG KONG.  
Pulse tracing, Plague, Radial, dicrotic, Lowson.



Pulse tracing, Plague, Radial, anacrotic, Lowson.  
Radial, Wong Ring, 1001. 5 | 8 | 94, P 102, Very ill.



to that of a turkey's egg. True carbuncles are not seen. Purpuric patches are common. The tongue is coated with a thin white fur, gradually changing to brown and black. Billious vomiting nearly always present. Oedema of the lungs is not unusual.

The duration of this stage is about five days. If the patient lives for a week his chances for recovery are good. The buboes may, of course, go on suppurating for weeks, and the patient may finally die of exhaustion from this cause.

A physician having discovered in his practice, under circumstances calculated to arouse suspicion, a case presenting the symptoms above recorded, what is his duty?

Not to call another physician into consultation, and then another, and spend hours, perhaps days, in wordy discussion over the nature of the case, but at once, by telephone, if possible, to notify the health authorities, and until their arrival to constitute himself the health authority for that particular house.

If the house is isolated, so that in the opinion of the physician the case could be treated in it without danger of the spread of infection to neighboring houses, he should at once select the best and airiest room in the house as a hospital, and strip it of all carpets, curtains and upholstered furniture. All members of the household whose services he does not need, should be placed in another part of the house. While the opinion of the physician is entitled to the most respectful consideration, the final determination as to the removal of the case to a hospital must of course rest with the health authorities. The physician should wash his hands and spray his hair and beard with a disinfectant after each visit, and should provide himself with a long linen duster or an India-rubber coat to wear in the sick room. This he can carry with him in a disinfected satchel if he has several cases of the disease to attend. Such articles should of course be frequently washed and disinfected. Before going to see patients suffering from other affections, he should take an antiseptic bath and make a complete change of clothing.

#### Precautions to be Taken by Health Authorities in the Presence of the Disease.

The house or hospital in which the disease exists must be conspicuously placarded and day-and-night guards established. Careful examination of all the inmates of the house should be instituted, and all healthy persons sent to another house, where they should be held under medical observation for eight days. Before such isolation their clothing should be disinfected.

When the house has been vacated by removal of the patient to a hospital, and of the suspects to a place of detention, it should at once be subjected to the most searching disinfection, and thoroughly



aired for a week. Immediately on the discovery of a case all persons who have been exposed should be sought out and kept under careful surveillance, being inspected twice daily. If they have gone to other towns the authorities of such places should be notified, giving name and description of each individual and probable destination. Immediately adjoining houses should be vacated and disinfected. Persons not under suspicion should be allowed free egress from the town. The public should be informed of the possibility of the spread of the infection through the air for short distances and warned to avoid the immediate neighborhood. Guards should be established at a distance of two hundred yards in every direction, if the warning is not heeded. The Secretary of the State Board of Health should be notified, at the earliest possible moment, either by telephone or telegraph, of the occurrence of the first case.

#### Precautions in the Sick Room.

Sheets and body clothing should be changed daily, oftener if necessary. The mattress should be protected by a rubber sheet.

The infection resides in the discharges from the stomach, bowels and contents of the buboes, therefore,

(1) All discharges should be received in a vessel containing about a pint of disinfecting solution, thoroughly mixed, and allowed to stand fifteen minutes, if possible, before emptying. If in the country, they should then be buried at least eight inches under ground, and remote from any well or running stream.

(2) Any clothing, bedding, towels, napkins, or handkerchiefs, soiled by a patient, should at once be immersed in a strong disinfecting solution, allowed to remain four hours, and then boiled or exposed to dry heat for four hours (230 Fahr.).

(3) After the recovery or death of the patient, such of his clothing as can not be disinfected should be burned. All utensils used by the patient should be placed at once in a disinfecting solution before being washed.

(4) During the convalescence all the discharges of the patient must be treated as infectious.

(5) All clothing worn by the patient when taken sick should be at once destroyed by fire.

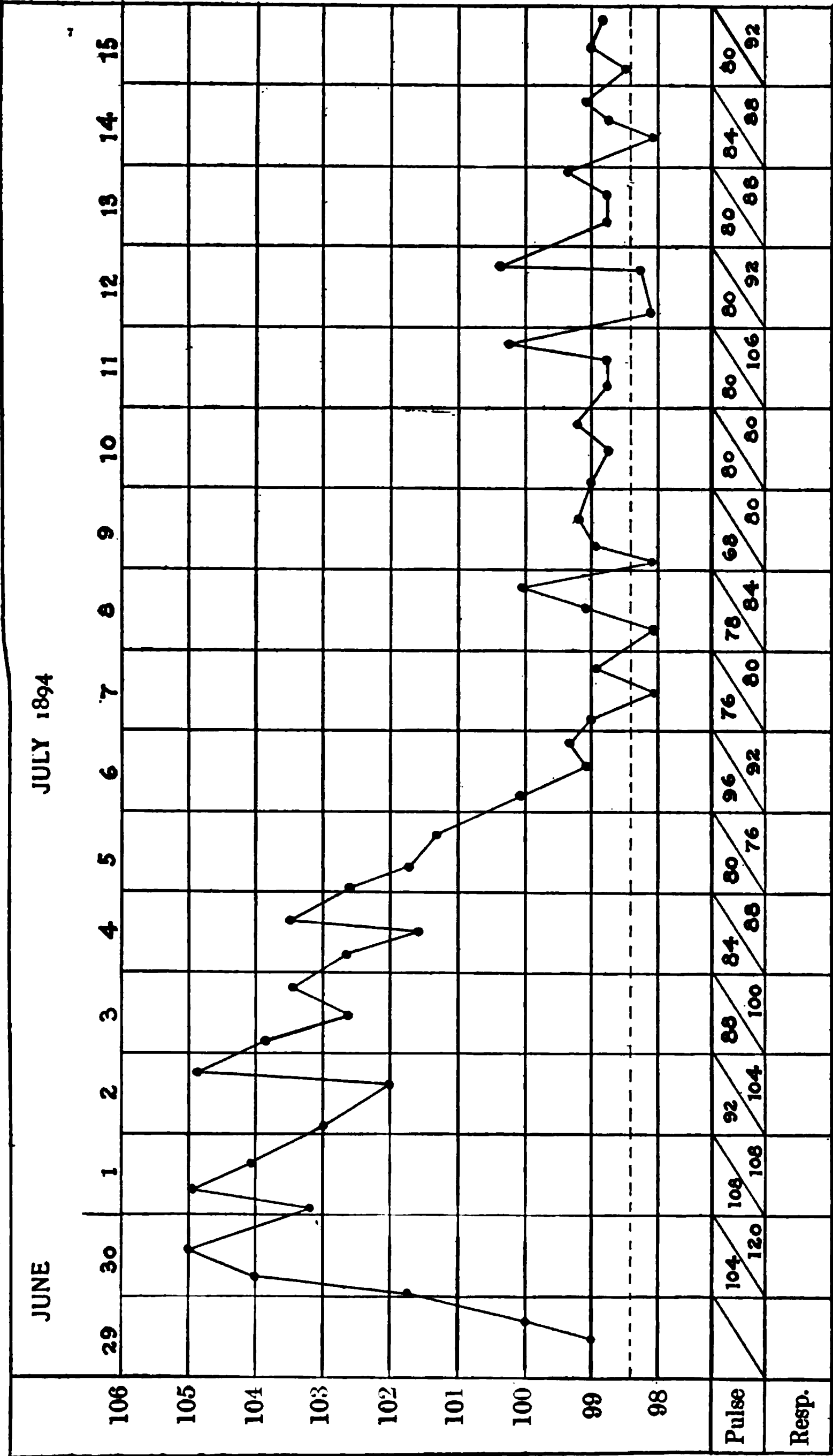
(6) Nurses and attendants should have any scratches or abrasions on their hands frequently treated antiseptically. A thin rubber-tissue finger-cot affords much protection.

Inasmuch as the infection resulting from a patient does not become active under forty-eight hours, strict attention to these rules should absolutely prevent the extension of the disease. The house must nevertheless be considered as infected and no one must be allowed to enter it except on official duty.



PLAQUE AT HONG KONG—LOWSON.  
Japanese Aet. 33.

Dr. I. was assisting Kitasato in bacteriological work. Whilst preparing to remove Aoyama to the Hygeia our attention was directed to this patient who had that day felt "out of sorts," and on taking his temperature found it was 102 degrees F. pulse rapid, considerable headache, no shiver, slight pain in left axilla. In addition he had the indefinable appearance of a plague patient, the recognition of which comes intuitively to one who has seen a lot of the disease. He was at once removed with his colleague to the Hygeia. On arrival there his temperature was 99 degrees F. At midnight it was 103 degrees F. On the 30th at noon it was 104 degrees F., and at 6 P. M., it had reached its primary maximum 106 degrees F. Discharged cured on August 3d. Bacilli found in blood morning of the 30th of June. Bubo was opened on the 8th and was almost closed when he left for Japan.



No mention has been made in this circular of the quarantine of cities and towns, as that duty belongs more properly to the State and National authorities. No town should take the serious step of quarantining against a neighboring town without previous consultation with the State Board of Health. Much misery and little good have resulted from this measure. The means taken to enforce it are ineffective and often cruel and burdensome. At the present time train inspection is largely relegated to the United States Marine Hospital Service, whose valuable aid the State Board of Health would not hesitate to invoke should this measure be deemed desirable.

### Precautions in Regard to Burial.

After death the body must be at once wrapped in a sheet saturated with a solution of corrosive sublimate (standard solution No. 2) and buried as soon as possible. The funerals must be private. Newspapers should, in notices of death, mention name of disease so that people may voluntarily remain away. Undertakers should not furnish chairs at funerals of those who have died from contagious diseases; and such articles as they regularly use in their business, if taken to such a house, should be washed with a solution of corrosive sublimate before being used elsewhere. The ice box should never be used in such cases.

### Disinfection of Premises and Effects after Recovery or Death.

This work should be done thoroughly, and generally it will be best done by an intelligent person who has had experience in it.

Recent investigations by a committee of the American Public Health Association show that some substances on which much reliance has been placed, are of little value as disinfectants. Only those which the committee recommend are here mentioned.

Burn as many of the articles which have been about the sick as possible.

### Standard Disinfecting Solutions Recommended by the State Board of Health.

1. Standard Solution No. 1.—Dissolve chloride of lime or bleaching powder of the best quality (containing at least twenty-five per cent. of available chlorine) in soft water in the proportion of four ounces to the gallon.

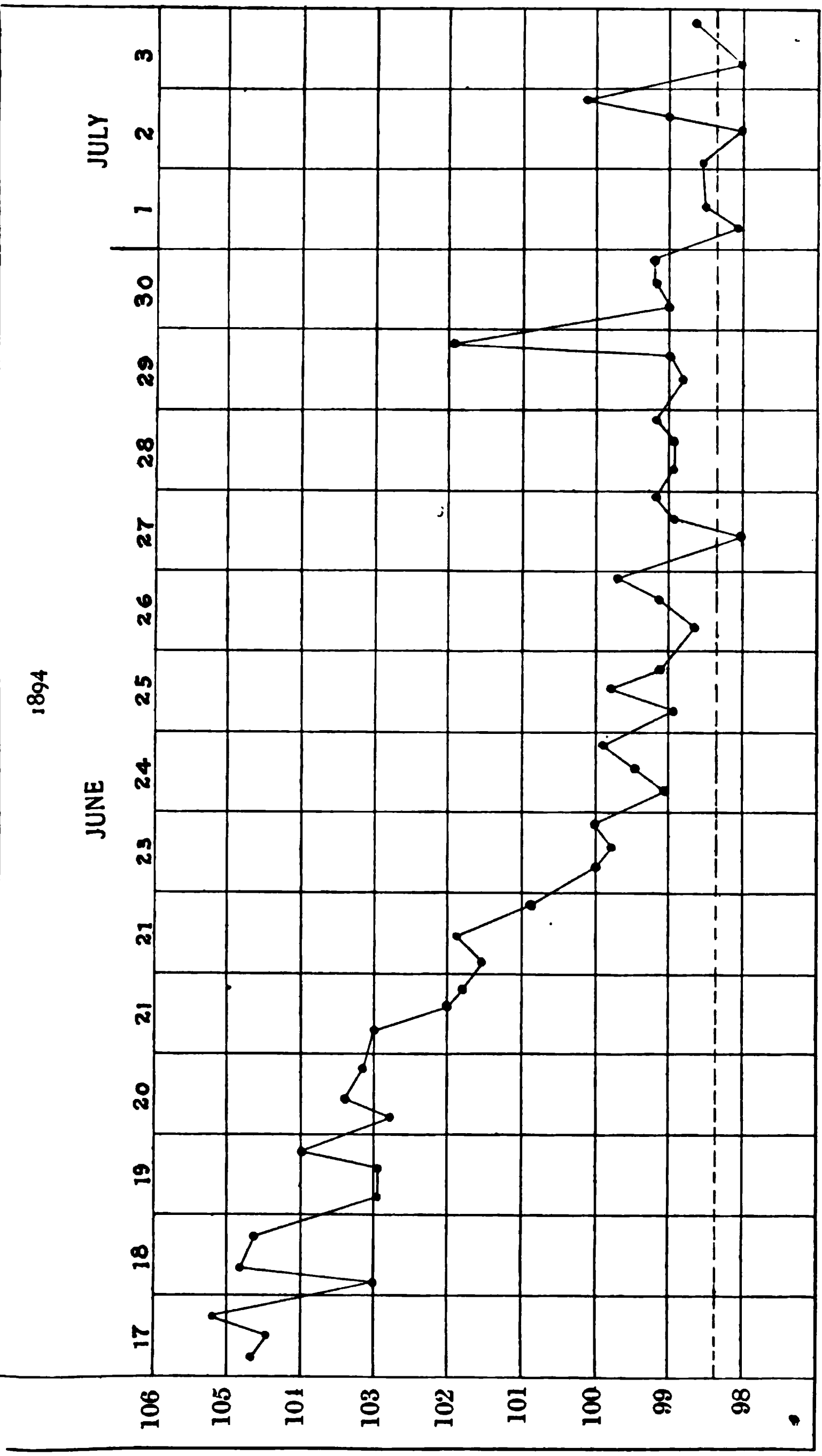
2. Standard Solution No. 2.—Dissolve corrosive sublimate and permanganate of potash in soft water in the proportion of two drachms of each salt to the gallon.

3. Standard Solution No. 3.—To one part of hypochlorite of soda add five parts of soft water.

PLAGUE AT HONG KONG—Lowson.

Chinese. Aet. 28.

Admitted 17th of June, 1894, with fever and vomiting during the previous twenty-four hours. Right femoral bubo, no headache. After a lengthened convalescence she was discharged on August 20th, repeated attacks of lymphangitis above the knee having occurred for two or three days at a time during that period.



4. Standard Solution No. 4.—Dissolve corrosive sublimate in water in the proportion of four ounces to the gallon. One fluid ounce of this solution to the gallon of water is sufficiently strong. Articles should be left in it for two hours. One gallon of standard solution No. 1 may be mixed with nine gallons of water and used in the same way. No article should be allowed to leave the infected room until it has been either disinfected or boiled.

NOTE—Corrosive sublimate solution should be kept in wooden or crockery vessels.

#### To Disinfect Discharges from the Patient.

Use Standard Solutions Nos. 1, 2 or 3, keeping a pint of the solution used constantly in the vessel ready for any emergency. Let the discharge be passed directly into the solution. Then let a pint more of it be added, and let the whole stand some time to be thoroughly acted upon before being thrown into the sewer or being burned. Ordinary whitewash, freshly made or preserved by pouring a thin film of coal oil on its surface, is also very useful for this purpose. These discharges should never be thrown into a privy or cess-pool, nor into a running stream, nor on the surface of the ground. Pocket handkerchiefs should not be used, but small pieces of rag employed instead, for wiping the nose and mouth. Each piece, after being once used, should be immediately burned. The playthings used in the sickness should also be burned. A vessel containing a disinfecting solution, should always be by the bedside for the patient to spit into.

#### To Disinfect Clothing, Towels, Napkins, Bedding and Such Textile Fabrics as can be Washed.

Burn as much as possible. Use standard solution No. 4, one ounce to the gallon of water, or use one gallon of solution No. 1, in nine gallons of water. Let the goods soak in the solution for at least three hours before they leave the room. Stir them up so that the solution gets all through the goods. After disinfection boil the goods thoroughly.

#### For the Disinfection of Water Closets, Urinals, Sinks and Cess-Pools.

5. Carbolic Acid Solution.—Mix one pint of carbolic acid with two and a half gallons of water.

Standard Solution No. 4, diluted with three parts of water, may also be used in the proportion of one gallon (of the solution) to every four (estimated) of the contents of the vault. Standard solution No. 1, would require to be used gallon for gallon of the material disinfected. Dry chloride of lime may be sprinkled over the contents of a privy, or standard solution No. 2, may be made up by the barrel, and four or five gallons be applied daily during an epidemic.

### To Disinfect the Sick Chamber.

The room must be vacated. The paper should be carefully scraped from the walls. Thorough ventilation for several days after disinfection is of the utmost importance. Thorough washing of all surfaces with one of the disinfecting solutions, say one pint of standard solution No. 4, to four gallons of water, or a quarter of a pint of solution of hypochlorite of soda to a gallon of water is the next step. The walls and ceiling, if plastered, should be washed with this and then whitewashed. All dust must be carefully washed (not brushed or swept) away from the ledges, cracks, corners and crevices.

### Sulphur Fumigation.

To use this effectively, four pounds of sulphur should be burned in a room ten feet square. Every opening in the room—flues, doors, windows, cracks and crevices—must be closed, except the door by which the disinfector is to escape; closet doors and bureau drawers should be opened wide, and all woolen articles which have been in the room during the sickness, hung on lines, being spread out and opened up as much as possible. The sulphur is to be burned in an iron kettle or other vessel set in a tub containing a little water to guard against fire. A small quantity of water should be evaporated at the same time. A little alcohol or kerosene must be poured upon the sulphur, by means of which it may be ignited. Leave the room quickly, for the fumes are highly poisonous when breathed, and close the door tightly. Let the room remain closed twenty-four hours or more. Then air thoroughly for several days.

### Formaldehyde (Formalin).

This comparatively new substance promises to supersede sulphur as an aerial or gaseous disinfectant. Not only does it appear to be equally penetrating and more destructive to germ life, but it possesses the very great advantage of not injuring the colors of fabrics, or wall papers, or tarnishing and corroding metallic surfaces. It is also known as Formic Aldehyde, and is a gas developed by the action of a red hot surface of platinum on the vapor of wood alcohol, or wood spirit (methyl-alcohol). A saturated (40 per cent.) solution of this gas in water is sold under the name of Formalin.

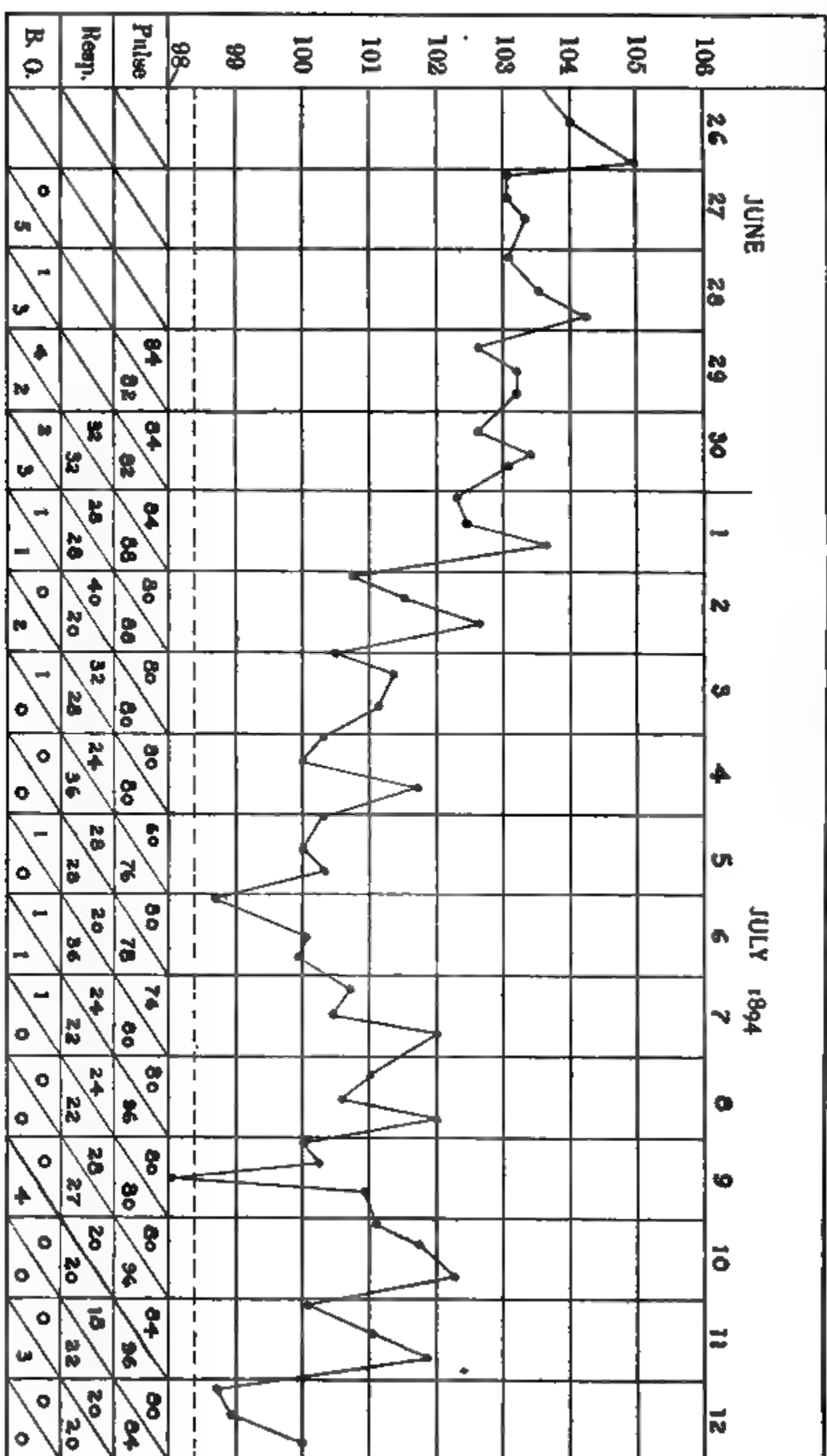
The gas may be generated directly in the apartment to be disinfected, the same precautions being taken as regards stopping up crevices as in using sulphur fumes. Formalin may be mixed with water in the proportion of two parts to the hundred, and applied with a sprayer directly to surfaces to be treated, or may be forced undiluted into the closed apartments through a key hole or other orifice, in the form of vapor or atomized fluid.

PLAQUE AT HONG KONG—LOWSON.

English. Aet. 24.

On the 26th of June at 8 P. M., was requested to see this patient, found him with the 2nd of June felt quite well. On the 26th of June at 10 A. M., felt feverish, some left femoral region. On the 26th knocked off work. A long and tedious convalescence swelling having disappeared and the scar being firmly healed.

and had him removed to the Hygeia at once. History—on same evening 105 degrees F. Noticed slight swelling in discharge from hospital on December 24, the most of the



Another mode of application is to dilute Formalin with an equal quantity of water, and evaporate it in wide pans by gentle heat. For every 1,000 cubic feet of air space, a pint of this mixture is required, or it may be evaporated from sheets moistened with a mixture of one part of Formalin to two of water and hung up in the room. For this method, three pints of the mixture should be evaporated for every 1,000 cubic feet of air space. The temperature of the room should not be allowed to fall below 60 degrees F.

There is testimony of convincing character both from scientific experiments and practical health officers as to the efficiency of all these modes of application.

After the disinfection of apartments by Formaldehyde gas, the latter should be neutralized by ammonia gas, evolved from water of ammonia by heat, or by evaporation from water of ammonia sprinkled upon the floor. The quantity of water of ammonia required for neutralization, after the above named method, is as follows:  $1\frac{1}{4}$  litres (1.26 quarts) of water of ammonia for each litre (1.01 quarts) of Formaldehyde.

The efficiency of Formaldehyde gas is greatest in a temperature ranging between 50 and 90 degrees F. In low temperature the gas does not have so great penetrating power and is apt to deposit as paraform, or solid Formaldehyde, and thus fails to act so energetically as in a higher temperature.

#### Disinfection by Superheated Steam Under Pressure.

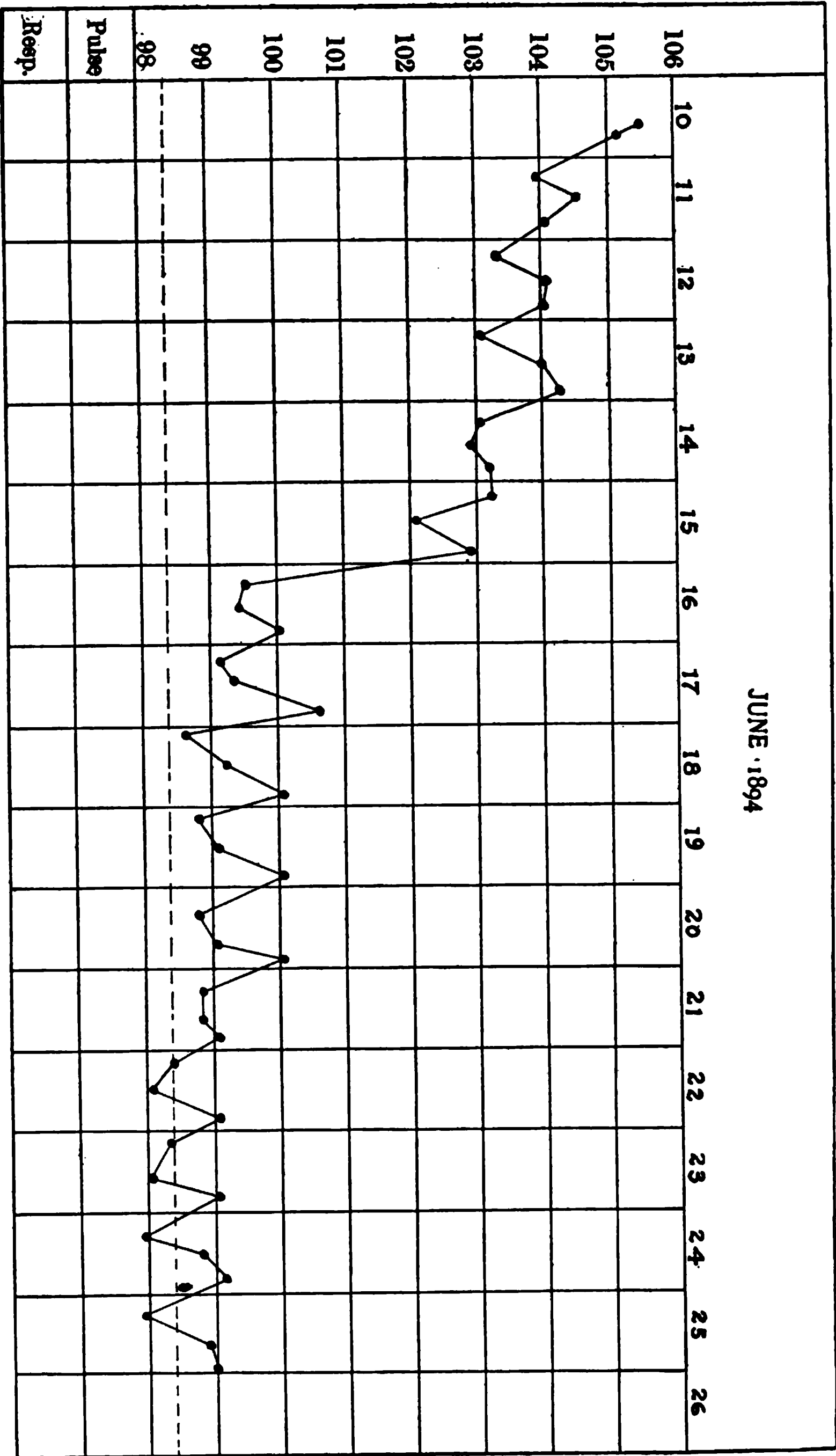
Every large city should possess a steam disinfecting plant, in which infected articles can be subjected to the action of superheated steam (100 degrees to 102 degrees, Centigrade). An exposure of half an hour is sufficient. Small cities should provide themselves with a portable steam disinfecting apparatus.

This man was on the whitewashing party for twenty days before becoming ill. Felt sick with slight shivering on the 8th of June. On the 10th of June admitted to the Hygeia, with vomiting, temperature 106 degrees F., no headache, small femoral bubo in left groin, yellow furred tongue, pulse full and bounding, but yet easily compressible. On the 21st the bubo was opened and there was a considerable amount of pus evacuated. Discharged on the 27th of July.

PLAQUE AT HONG KONG—LOWMOO.

English. Act. 23.

JUNE 1894





## CIRCULAR NO. 54.

MODEL REGULATIONS FOR SCHOOL BOARDS ACTING AS  
BOARDS OF HEALTH.Sanitary Regulations of the School Board of ..... Township Or-  
ganized as a Board of Health.

In virtue of the powers conferred by act of General Assembly No. 37, approved the 11th day of April, A. D. 1899, the school directors of ..... township do hereby adopt and promulgate the following regulations:

1. It shall be the duty of all school teachers in ..... township to promptly report to the local director any case of contagious or infectious disease known by them to exist within the township.

2. It shall be the duty of all physicians practicing in ..... township to report to the Secretary of this Board the names and residences of all persons coming under their professional care afflicted with any contagious disease within twenty-four hours after the development of such disease.

3. The local director or secretary shall promptly, on receipt of such information, post, or through the sanitary agent of the board, cause to be posted, upon such infected house a placard prominently designating the name and nature of such disease, and establishing a quarantine of the infected premises until medical certificates, furnished to the school board, establish that such restrictions are no longer necessary.

4. Any breach of said quarantine, or any violation of the provisions of the act of Assembly of April 11, 1899, giving to township school boards the powers of boards of health, or any failure to comply with such orders of such school boards as may be needful to give effect to the various provisions of said act, either for the restriction of the spread of contagious diseases or for the abatement of nuisances, shall subject the offender to a fine of not less than five dollars, said fines to be collected before any alderman or justice of the peace, at the suit of said school board, the proceeds to be devoted to the general school purposes of the township.

5. All principals and teachers in charge of schools in this township or school district are hereby required to refuse the admission of any child to the schools under their charge or supervision except upon a certificate signed by a physician setting forth that such child has been vaccinated, or that it has previously had small-pox. The registry of all schools shall exhibit the names and residences of all children

NOTE.—The act of June 11, 1895, page 206, Section II, covers attendance of children from infected houses, and is hereby adopted as a portion of these regulations.

or persons admitted or rejected for reasons set forth in this regulation, and any principal or teacher who shall fail, neglect or refuse to comply with this regulation shall, for every such offense, upon conviction thereof before any justice of the peace, be liable to a fine or penalty of not less than five dollars or more than one hundred dollars, which fine or penalty shall be paid into the treasury of this school board, and in default of payment thereof such person or persons so convicted shall undergo an imprisonment in the county jail for a period not exceeding sixty days.

6. Any bone-boiling establishment or depository of dead animals existing in or to be erected and conducted in this township or school district shall be conducted under the supervision and by permission of this Board and in accordance with the regulations prescribed by the State Board of Health, and every person offending against the provisions of these regulations shall for every such offense and each month's continuance of the same, after notice, forfeit and pay to the school board of this district or township the sum of \$50.00 to be recovered as debts of that amount are recoverable, and also be liable to indictment at common law for creating and maintaining a nuisance.

NOTE.—Sections 12, 13 and 21 of the Act of Assembly of the 18th day of June, A. D. 18.

NOTE.—Act of Assembly approved the 19th day of May, A. D. 1897.

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## PRECAUTIONARY AND HYGIENIC CIRCULARS ISSUED BY THE STATE BOARD OF HEALTH OF PENNSYLVANIA.

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No. 7. Precautions against Cholera, Cholera Infantum, Cholera Morbus, Summer Diarrhoea and Dysentery.

No. 7. Precautions against Cholera, etc. (German.)

No. 7. Precautions against Cholera, etc. (Slovak.)

No. 7. Precautions against Cholera, etc. (Italian.)

No. 8. Precautions against Small-Pox.

No. 18. Precautions against Typhoid Fever.

No. 19. Precautions against Diphtheria.

No. 20. Contagious and Infectious Diseases.

No. 20. Contagious and Infectious Diseases. (German.)

No. 20. Contagious and Infectious Diseases. (Slovak.)

No. 20. Contagious and Infectious Diseases. (Italian.)

No. 21. Precautions against Scarlet Fever.

No. 22. Precautions against Trichinosis.

No. 22. Precautions against Trichinosis. (German.)

No. 24. Recommendations in regard to the care of Infants.

No. 25. (Revised.) The "Act for the better protection of the health and morals of school children;" with a description of a cheap and convenient earth closet.

No. 26. School Hygiene, addressed to Teachers.

No. 27. Camp Hygiene.

No. 28. Precautions against Consumption.

No. 29. The dangers arising from public funerals of those who have died from Contagious and Infectious Diseases, Addressed to the Clerical Profession.

No. 30. The disposal of the Sewage of Public Edifices. Addressed to the Trustees and Managers of Public Institutions.

No. 31. Precautions to be adopted by Funeral Directors to prevent the spread of Contagious and Infectious Diseases.

No. 32. Precautions against Sunstroke.

No. 33. School Hygiene, No. 2. Addressed to School Directors and Trustees.

No. 34. First Treatment of the apparently Drowned and Suffocated.

No. 35. The Prevention of Blindness.

No. 36. Sanitary Protective Associations.

No. 37. Emergency Hospitals.

No. 38. The Care of the Eyes.

No. 39. Dairy Hygiene.

No. 40. The Law establishing Boards of Health in Boroughs.

No. 41. Personal Precautions recommended to be taken by Physicians in attending those suffering from certain Communicable Diseases.

No. 42. How to meet Cholera. Addressed to Boards of Health.

No. 43. Model Regulations for the Storage and Removal of Garbage.

No. 44. Model Rules of Boards of Health.

No. 45. Powers and Possibilities of Boards of Health.

No. 46. The Sanitary Code of Pennsylvania for the Restriction of Communicable Diseases.

No. 47. Precautions against Whooping Cough.

No. 48. Precautions against Measles.

No. 49. Suggestions with regard to Railroad Hygiene and the Prevention of Accidents.

No. 50. School Hygiene No. 5. On the Teaching of Hygiene in the Public Schools. Addressed to Superintendents and Principals.

No. 51. Precautions against Yellow Fever.

No. 52. Hygienic Hints for Barbers and Hair-Dressers.

No. 53. Precautions against the Plague.

No. 54. Model Regulations for School Boards Acting as Boards of Health.

Any of the above circulars may be obtained by residents of Penn-

sylvania on application to Dr. Benjamin Lee, Secretary of the State Board of Health, 1420 Chestnut street, Philadelphia, enclosing a two cent postage stamp. The postage for the entire series, enclosed in a substantial box envelope, is nine cents. .

BENJAMIN LEE, M. D.,  
Secretary.

Form 15—(Revised).

Commonwealth of Pennsylvania.

STATE BOARD OF HEALTH AND VITAL STATISTICS.

Model Form of a Return of a Death.

Permit No. .... No. ....

The Special Attention of Physicians is respectfully invited to the Remarks below, and to the List of Diseases on the back of this Certificate.

CERTIFICATE OF DEATH.

To the Health Officer of .....

Full Name of Deceased .....

Color—White. Sex—Male. Conjugal Condition—Single.

Black (Negro or Mixed). Female. Married.

Indian. Widow.

Chinese. Widower.

Japanese. Divorced.

NOTE.—Strike out words not applicable.

| Date of Death.   | Date of Birth.               | Age.         |
|--|------------------------------|--------------|
| Year, .....  | Year, .....                  | Year, .....  |
| Month, .....   | Month, .....                 | Month, ..... |
| Day, .....   | Day, .....                   | Day, .....   |
| Occupation, .....  |                              |              |
| Birthplace, .....  |                              |              |
| Duration of Residence in, .....  |                              |              |
| Birthplace of Father, .....  | Birthplace of Mother, .....  |              |
| When a Minor, {  | Name of father, .....        |              |
|  | Name of mother, .....        |              |
| Place of Death, No., .....   | Street, .....                | Ward.        |
| If death occurred in an institution, give the name of same, .....  |                              |              |
| Length of time deceased was an inmate, ....., and previous residence.  |                              |              |
| Cause of Death, {  | First, (predisposing), ..... |              |
|  | Second, (immediate), .....   |              |
| Duration of last sickness, .....   |                              |              |
| All of the above information should be furnished by the Physician.   |                              |              |
| In case of death by communicable disease, please state what, if any, local cause exists to produce the same. |                              |              |
| Place where Disease was Contracted, if other than place of death, .....                                      |                              |              |
| Place of burial, .....   |                              |              |
| Date of burial, .....  |                              | M. D.        |
| { Undertaker, .....  |                              |              |
| { Place of Business, .....   | Address, .....               |              |

No Incomplete Return will be Accepted.

COPY OF CERTIFICATE OF DEATH.

(To be retained by Physician.

|   |                           |
|---|---------------------------|
| Date of Death, .....                        |                           |
| Name of Deceased, .....                     |                           |
| Sex: Male or Female, .....                  | Age, .....; Color, .....  |
| Married. Single, Widow, Widower, .....      |                           |
| Occupation, .....                           |                           |
| Birthplace, .....                           |                           |
| Duration of Residence in, .....             |                           |
| Nativity of Father, .....                   | Nativity of Mother, ..... |
| Place of Death, .....                       |                           |
| Cause of Death: First (Predisposing), ..... | Second (Immediate), ..... |
| Duration of Last Sickness, .....            |                           |
| Remarks.                                    |                           |
| .....                                       |                           |

Extract from Model Regulations.

Section 47. Every undertaker or other person who may have charge of the funeral of any dead person, shall procure a properly filled out certificate of the death and its probable cause, in accordance with the form prescribed by the State Board of Health, and shall present the same to the designated officer or member of the Board of Health, and obtain a burial or transit permit thereupon, at least twenty-four hours before the time appointed for such funeral; and he shall not remove any dead body until such burial or transit permit shall have been procured.

Note.—In any City, Borough or Township the appropriate regulation of the local Board of Health can here be substituted.

THE FOLLOWING ADDITIONAL INFORMATION IS REQUESTED IN RELATION TO THE CAUSES OF DEATH ENUMERATED BELOW:

- \*Appendicitis.
- \*Aneurism—Mode of death.
- Cer. Spinal Meningitis—Variety, whether epidemic or simply inflammatory.
- Childbirth—Circumstances producing death.
- \*Cancer—Variety and seat.
- Calculus—Mode of death.
- Dentition—Mode of death.
- Disease of Heart—Variety. Valves involved.
- Dropsy—Variety and cause, and serous sac involved.
- Enteritis and Gastro Enteritis—Cause. Whether diarrhoea or not.
- Erysipelas—Seat and Cause.
- Fractures—Cause and mode of death.
- Gangrene—Seat and cause.
- Gastritis—Cause.
- \*Hernia—Variety and mode of death.
- Insanity—Variety and mode of death.
- Jaundice—Cause and mode of death.
- Mania Acute—Cause and mode of death.
- Miscarriage—Cause and mode of death.
- Malignant Pustule—Location and Cause.
- Malformation—Variety.
- Metritis—Variety and cause.
- Necrosis—Seat. Cause and mode of death.
- \*Ovarian Tumor—Mode of death.
- Paralysis—Variety and cause.
- Peritonitis—Cause, other than appendicitis.
- Phlebitis—Cause.
- Pyaemia—Cause. Nature of injury, if any.
- Premature Birth—Cause. Foetal age.
- Preternatural Birth—Manner of.
- Syphilis—Variety, chief location and mode of death.
- Tetanus—Nature of injury, if any.
- Ulcer—Nature, chief location and mode of death.
- Violence—Cause, variety, seat and mode of death.
- Abscess—Cause, location and mode of death.
- Specify every surgical operation with fatal result.
- Mention INTEMPERANCE whenever recognized as having produced or complicated the direct cause of death.
- In diseases marked thus \* state if operation has been performed.
- In cases of death resulting from violence, state whether accidental, homicidal, suicidal or in pursuance of legal judgment.

REMARKS.

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Form 17.

Commonwealth of Pennsylvania.

State Board of Health and Vital Statistics.

Model Form for a Report of Communicable Disease.

Report of Communicable Disease

Of One or More cases, in One Family, When Possible, Should be  
Made by a Physician.

This Report must be made, within twenty-four hours, to the Local Health Authorities of the Township, Borough or City in which the sick person is.

Extract From Model Ordinance.

Section 32. Whenever any householder knows that any person within his family or household has a communicable disease, dangerous to the public health, he shall immediately report the same to the Board of Health, giving the street and number or location of the house.

Section 33. Whenever any physician finds that any person whom he is called upon to visit has a communicable disease, dangerous to the public health, he or she shall immediately report the same to the Board of Health, giving the street and number or location of the house.

Disease and date of first symptoms, .....  
Name and residence of patient, .....Sex, ..... Age, .....  
Origin of first outbreak, .....  
Number of persons in family, .....; Male, ..... ages, .....;  
Female, ..... ages, .....  
Others exposed? Who and where? .....  
Name and address of attending physician, .....  
Name and address of person making this return, .....



## AN ACT

To provide for the more effectual protection of the public health in the several municipalities of this Commonwealth.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by authority of the same, That every physician located or practicing in any of the municipalities of this Commonwealth, who shall know that any person whom she or he is called upon to visit, or who comes or is brought to him or her for examination, is suffering from, or is afflicted with cholera, small-pox (variola or varioloid), diphtheria, diphtheritic croup, membranous croup, scarlet fever, typhoid fever, typhus fever, yellow fever, epidemic cerebro-spinal fever, relapsing fever or leprosy, shall forthwith make report in writing, or upon blanks to be furnished for that purpose, to the health authorities of the municipality in which said person may be located, which said report shall, over his or her own signature, state the name of the disease and the name, age and sex of the person suffering therefrom, and shall also set forth by street and number, or otherwise sufficiently designate the house, room or other place in which said person may be located, together with such other information relating thereto as may be deemed important by said health authorities.

Section 21. Any physician, undertaker, principal of a school, superintendent of a Sunday school, sexton, janitor, head of a family, or any other person or persons named in this act, who shall fail, neglect or refuse to comply with, or who shall violate any of the provisions or requirements of this act, shall for every such offense, upon conviction thereof before any mayor, burgess, alderman, police magistrate, or justice of the peace of the municipality in which said offense was committed, be liable to a fine or penalty therefor of not less than five dollars, or more than one hundred dollars, which said fines or penalties shall be paid into the treasury of said municipality, and in default of payment thereof, such person or persons so convicted shall undergo an imprisonment in the jail of the proper county for a period not exceeding sixty days.

Approved—The 18th day of June, A. D. 1895.

DANIEL H. HASTINGS.

FORM 25.

Commonwealth of Pennsylvania.

State Board of Health.

..... District.

Report

of inspection at ..... by ..... Inspector,  
on account of .....  
..... 18 .

To the Secretary of the State Board of Health:

Sir: I have the honor to report that in compliance with instructions received from you ..... 189 , I visited  
..... on ..... and found the following conditions to exist:

Note.—Inspectors are requested to follow as nearly as possible the following order: Population. Whether Incorporated. Name of Health Officer or Chief Burgess. Location and Geological Formation. Drainage. Water Supply. Prevalent Diseases. Present Epidemic, if any. Verification of Diagnosis. Number of Cases. Duration of Epidemic. Type of Disease. Precautions already taken. Precautions suggested.

Inspectors will issue orders only when especially so instructed.

FORM 41.

State Board of Health of Pennsylvania,  
Executive Office,  
Philadelphia, ....., 18...

To all Health Authorities whom it may Concern:

This will certify, that .....  
has resided in ..... or vicinity for the last .....  
and has not during that time been exposed to any contagious or in-  
fectious disease.

This city is free from epidemics of all contagious or infectious dis-  
eases.

(Seal.)

.....  
Secretary.

FORM 42.

Commonwealth of Pennsylvania. State Board of Health and Vital  
Statistics.

Report on the prevalence of .....  
in ..... county, made to the State Board of Health  
for the week ending, ....., 189 .

| County. | City, borough or township. | Population. | Date of outbreak. | New cases since last report. | Total cases since outbreak. | Died. | Recovered. | Still sick. | Houses infected since outbreak. | Houses still infected. |
|---------|----------------------------|-------------|-------------------|------------------------------|-----------------------------|-------|------------|-------------|---------------------------------|------------------------|
|         |                            |             |                   |                              |                             |       |            |             |                                 |                        |

Origin, .....  
Precautions, .....

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## APPENDIX N.

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**LAWS OF THE COMMONWEALTH OF PENNSYLVANIA FOR THE BETTER PROTECTION OF LIFE AND HEALTH, PASSED BY THE GENERAL ASSEMBLY IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-NINE.**

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1. No. 10. An act to repeal so much of section one of an act, entitled "An act for the better government of cities of the first class in this Commonwealth," approved the first day of June, one thousand eight hundred and eighty-five, as relates to the Board of Health of said cities, and abolishing said board.
2. No. 11. An act creating a Bureau of Health in cities of the first class, and providing for its organization.
3. No. 32. An act to repeal an act, entitled "An act to repeal so much of section one of an act, entitled 'An act for the better government of cities of the first class in this Commonwealth,' approved the first day of June, one thousand eight hundred and eighty-five, as relates to the Board of Health of said cities, and abolishing said board,' approved March twenty-second, one thousand eight hundred and ninety-nine; also, to repeal an act, entitled "An act creating a Bureau of Health in cities of the first class, and providing for its organization," approved the twenty-second day of March, one thousand eight hundred and ninety-nine.
4. No. 37. An act to empower the school directors of the several townships of the Commonwealth of Pennsylvania to exercise the powers of a Board of Health in each township, to make rules and regulations to prevent the spread of contagious and infectious diseases, to appoint and fix compensation of a sanitary agent; and requiring all practicing physicians to report to the secretary of the board of school directors in each township the names and residences of all persons coming under their professional care afflicted with such contagious or infectious diseases.
5. No. 44. An act to amend so much of section one of article three of an act, entitled "An act to provide for the better government of cities of the first class in this Commonwealth," approved the first day of June, Anno Domini one thousand eight hundred and eighty-five, as relates to the Board of Health in said cities; reorganizing the said Board of Health, fixing the number and terms of office of the members thereof, providing for the expiration of the terms of the present members of said Board, and providing for the appointment and compensation of a chief of the Board of Health, and prescribing his duties.

6. No. 59. An act for the protection of the public health, prohibiting hereafter the establishing or maintenance of additional hospitals, pest houses, and burial grounds in the built up portions of cities.
7. No. 64. An act to amend section four of an act, entitled "An act to regulate the employment and provide for the health and safety of persons employed where clothing, cigarettes, cigars and certain articles are made or partially made, and that said articles be made under clean and healthful conditions," approved May fifth, one thousand eight hundred and ninety-seven and providing additional penalties.
8. No. 71. An act to amend section one of the act, entitled "An act relating to mandamus," approved the eighth day of June, one thousand eight hundred and ninety-three; enlarging the power of the court of common pleas of the county in which the seat of government is or may be located to issue writs of mandamus.
9. No. 74. An act to amend section four of article eight of an act, entitled "An act relating to bituminous coal mines, and providing for the lives, health, safety and welfare of persons employed therein," approved the fifteenth day of May, Anno Domini one thousand eight hundred and ninety-three, permitting the use of mineral oils in bituminous mines, when used in approved safety lamps.
10. No. 79. An act to protect the public health by prohibiting the sale of goods in second-hand bottles or jars, and providing punishments for the violation of the same.
11. No. 86. An act to provide for the classification of the townships of the Commonwealth with respect to their population, into two classes, and to prescribe the form of government for townships of each class.
12. No. 113. An act amending section two, section five, section six, section seven, section eight, section eleven, section thirteen, section fifteen, section thirty-seven, section thirty-eight, section thirty-nine and section forty of an act, entitled "An act creating a Bureau of Health in the department of public safety in cities of the second class, defining the powers and duties thereof and of the officers thereunder, prescribing rules and regulations and laws respecting the public health, and authorizing and imposing fines, penalties and punishments for violations thereof," approved the twenty-sixth day of June, Anno Domini one thousand eight hundred and ninety-five.
13. No. 116. An act to prevent the pollution of the water supply of cities of the first class, being a supplement to an act, entitled "An act to establish a State Board of Health, for the better protection of life and health, and to prevent the spread of contagious and infectious diseases in this Commonwealth," approved June third, one thousand eight hundred and eighty-five.
14. No. 121. An act to regulate the sale of butter produced by taking original packing stock and other butter and melting the same, so that the butter oil can be drawn off, mixed with skimmed milk and by emulsion or other process produce butter, and butter produced by any similar process, and commonly known as "Boiled" or "Process" butter; providing for the enforcement thereof, and punishment for the violation of the same.
15. No. 136. An act to regulate the manufacture and sale of oleomargarine and butterine and other similar products, to prevent fraud and deception by the manufacture and sale thereof as an imitation butter, the licensing of manufacturers of and dealers in the same, and providing punishment for violations of the act and the means for its enforcement.
16. No. 148. An act to allow medical colleges of the Commonwealth of Pennsylvania to confer diplomas in public health.

17. No. 165. An act to provide for the current expenses of the State Board of Health and Vital Statistics for the two fiscal years commencing the first day of June, one thousand eight hundred and ninety-nine.
18. No. 267. An act to provide for the investigation of the diseases of domestic animals, and making an appropriation therefor.
19. No. 296. An act to establish an emergency fund to be used, as occasion may require, in the suppression of epidemics, prevention of disease, and protection of human life in times of disease and disaster, and making an appropriation therefor; and directing that the unexpended balance of the sums appropriated by the act approved the third day of July, one thousand eight hundred and ninety-seven, shall revert to the State Treasury, and become part of the general fund at the close of the fiscal year ending May thirty-first, one thousand eight hundred and ninety-nine.

## No. 10.

## AN ACT

To repeal so much of section one of an act, entitled "An act for the better government of cities of the first class in this Commonwealth," approved the first day of June, one thousand eight hundred and eighty-five; as relates to the board of health of said cities, and abolishing said board.

Repeal.

Section 1. Be it enacted, &c., That so much of section one of an act, entitled "An act for the better government of cities of the first class in this Commonwealth," approved the first day of June, one thousand eight hundred and eighty-five, as relates to the Board of Health of said cities, and the nomination and appointment of the members of said board of health, be and the same is hereby repealed, and the said board of health in cities of the first class is hereby abolished.

Approved—The 22d day of March, A. D. 1899.

WILLIAM A. STONE.

## No. 11.

## AN ACT

Creating a Bureau of Health in cities of the first class, and providing for its organization.

Bureau of Health.

Mayor shall organize at once.

Health officer's duties, etc., not altered.

Section 1. Be it enacted, &c., That the powers and duties now by law vested in the board of health of cities of the first class shall be exercised and performed by a bureau of the department of public safety of the said cities, to be known as the Bureau of Health. The mayor shall at once organize the said Bureau of Health, and shall supervise and control all the subordinate officers and employes therein. Nothing herein contained shall be construed to alter, abridge or repeal the powers, duties or emoluments of the health officer of the city or port of Philadelphia.

Approved—The 22d day of March, A. D. 1899.

WILLIAM A. STONE



## No. 32.

## AN ACT

To repeal an act, entitled "An act to repeal so much of section one of an act, entitled 'An act for the better government of cities of the first class in this Commonwealth,' approved the first day of June, one thousand eight hundred and eighty-five, as relates to the board of health of said cities, and abolishing said board," approved March twenty-second, one thousand eight hundred and ninety-nine; also, to repeal an act, entitled "An act creating a bureau of health in cities of the first class, and providing for its organization," approved the twenty-second day of March, one thousand eight hundred and ninety-nine.

Section 1. Be it enacted, &c., That the act, entitled "An act to repeal so much of section one of an act, entitled 'An act for the better government of cities of the first class in this Commonwealth,' approved the first day of June, one thousand eight hundred and eighty-five, as relates to the board of health of said cities, and abolishing said board," approved the twenty-second day of March, one thousand eight hundred and ninety-nine; also the act, entitled "An act creating a bureau of health in cities of the first class, and providing for its organization," approved the twenty-second day of March, one thousand eight hundred and ninety-nine, be and the same are hereby repealed.

Acts of March 22,  
1899, cited for re-  
peal.

Repeal.

Approved—The 11th day of April, A. D. 1899.

WILLIAM A. STONE.

## No. 37.

## AN ACT

To empower the school directors of the several townships of the Commonwealth of Pennsylvania to exercise the powers of a board of health in each township, to make rules and regulations to prevent the

spread of contagious or infectious diseases, to appoint and fix compensation of a sanitary agent; and requiring all practicing physicians to report to the secretary of the board of school directors in each township the names and residences of all persons coming under their professional care afflicted with such contagious or infectious diseases.

School directors shall have power and authority to make rules and regulations to prevent the introduction and spread of contagious and infectious diseases.

Section 1. Be it enacted, &c., That the school directors in each township of the State of Pennsylvania shall, in addition to the powers vested in them by existing laws, have full power and authority to make and enforce all needful rules and regulations to prevent the introduction and spread of contagious or infectious diseases, by the regulation of intercourse with infected places, by prohibiting from attending any public school any child or other person belonging to or residing with the family of any person, or residing in the same house, in which any person may be suffering from cholera, small-pox (variola, varioloid), scarlet fever, typhus fever, yellow fever, relapsing fever, diphtheria, diphtheritic croup or membranous croup, or any other contagious disease; and it shall be the duty of all physicians practicing within the several townships to report to the secretary of such school board the names and residences of all persons coming under their professional care, afflicted with any of the aforesaid contagious or infectious diseases, within twenty-four hours after the development of any such disease.

Physicians to report to secretary of school board the persons under their professional care, afflicted with contagious or infectious diseases.

School directors and the sanitary agent of the board to have powers to enter on premises in which there is suspected to be such diseases, or a nuisance productive thereof, for the purpose of examination, etc.

Section 2. In the case of the prevalence of any contagious or infectious disease in any township of this Commonwealth, the board of school directors of such township shall have power by themselves, or by a sanitary agent to be by them appointed, to enter at any time upon any premises in the said township in which there is suspected to be any contagious or infectious disease, or nuisance productive of such disease or detrimental to the public health, for the purpose of examining the said premises and abating any nuisance found thereon detrimental to the public health.

School boards may appoint a sanitary agent and fix his compensation. If the court or judge thereof shall approve.

Section 3. Before appointing any sanitary agent to aid in enforcing the rules and regulations of the board, as aforesaid, the board shall make application to the court of common pleas of the county in which the

township is located, or to a law judge thereof, setting forth particularly the reasons which, in their judgment, make the appointment of such agent necessary, setting forth also the compensation which the board deems proper to pay for the services of such sanitary agent, and if the said court, or judge thereof, shall approve the reasons given by the said board for the appointment of such sanitary agent, and shall also approve the compensation deemed proper therefor, said board shall have the authority to appoint such sanitary agent for such term as may be designated by the said court, or judge thereof, the said compensation to be paid out of the school fund of the respective townships.

Term of appointment.

Compensation, how paid.

Approved—The 11th day of April, A. D. 1899.

WILLIAM A. STONE.

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No. 44.

### AN ACT

To amend so much of section one of article three of an act, entitled "An act to provide for the better government of cities of the first class in this Commonwealth," approved the first day of June, Anno Domini one thousand eight hundred and eighty-five, as relates to the board of health in said cities; reorganizing the said board of health, fixing the number and terms of office of the members thereof, providing for the expiration of the term of the present members of said board, and providing for the appointment and compensation of a chief of the board of health, and prescribing his duties.

Section 1. Be it enacted, &c., That so much of section one of article three of an act of Assembly, entitled "An act to provide for the better government of cities of the first class in this Commonwealth," approved the first day of June, Anno Domini one thousand eight hundred and eighty-five, as reads as follows: "In cities of the first class the board of health shall continue with the powers and duties now vested in it by law, but the members thereof shall be five in number, to be nominated by the mayor and confirmed by the select council

Act of June 1, 1885, cited for amendment.

for the period of three years. The present members thereof shall serve until the expiration of their terms of office respectively, but when their number shall be reduced below five, then the mayor shall nominate persons to fill the vacancies resulting therefrom so that the number shall be always five, but the board of health shall be attached to the department of public safety. The director of public safety shall ex-officio be a member and president of the board of health, and as chief executive officer thereof, subject to the resolutions and orders of the said board, appoint, supervise and control all the subordinate officers and employes attached to the board," be and the same is hereby amended so as to read as follows:

Board of health to continue with powers and duties now vested in it by law.

Shall consist of three members to be appointed by the mayor.

Terms of office.

One member to be designated by the mayor as chief of board, who shall be president, and who shall appoint, supervise and control subordinate officers and employes.

Salary.

In cities of the first class the board of health shall continue with the powers and duties now vested in it by law, but the members thereof shall be three (3) in number to be nominated by the mayor and confirmed by select council for the period of four (4) years, beginning upon the first Monday of May, Anno Domini one thousand eight hundred and ninety-nine. The present members of the said board shall serve until the first Monday of May, Anno Domini one thousand eight hundred and ninety-nine, upon which date their terms of office shall severally expire. One of the members of the said board to be so appointed shall be designated by the mayor to be known as the chief of the board of health, who shall be president of the said board, and who shall appoint, supervise and control all the subordinate officers and employes attached to the said board, and who shall receive such salary as shall be fixed by councils. The said board shall be attached to, and be a part of the department of public safety.

Section 2. All acts or parts of acts inconsistent herewith be and the same are hereby repealed.

Approved—The 12th day of April, 1899.

WILLIAM A. STONE.

## No. 59.

## AN ACT

For the protection of the public health, prohibiting hereafter the establishing or maintenance of additional hospitals, pest houses, and burial grounds in the built up portions of cities.

Section 1. Be it enacted, &c., That for the purpose of protecting the public health, it shall be unlawful hereafter to establish or maintain any additional hospital, pest house, or burial ground in the built up portions of cities: Provided, however, That nothing herein contained shall be so construed as to prevent the maintenance of any hospital, pest house, or burial ground now lawfully established and maintained in such portions of cities.

Protection of public health.

Proviso.

Approved—The 20th day of April, A. D. 1899.

WILLIAM A. STONE.

## No. 64.

## AN ACT

To amend section four of an act, entitled "An act to regulate the employment and provide for the health and safety of persons employed where clothing, cigarettes, cigars and certain other articles are made under clean and healthful conditions," approved May fifth, one thousand eight hundred and ninety-seven, and providing additional penalties.

Section 1. Be it enacted, &c., That section four of an act, entitled "An act to regulate the employment and provide for the health and safety of persons employed where clothing, cigarettes, cigars and certain other articles are made or partially made, and that said articles be made under clean and healthful conditions," approved May fifth, one thousand eight hundred and ninety-seven, which reads as follows:

Act of May 5, 1897, cited for amendment.

"Section 4. Any person who violates any of the provisions of this act, or refuses to comply with any require-

ments of the Factory Inspector or a Deputy Factory Inspector as provided herein, shall be guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than twenty dollars nor more than fifty dollars for the first offense, and not less than fifty dollars nor more than one hundred dollars for a second offense, or imprisonment for not more than ten days; and for a third offense by a fine of not less than two hundred and fifty dollars and not more than thirty days imprisonment," be amended to read as follows:

Violation of act  
declared a misde-  
meanor.

Penalty.

Inspector and dep-  
uties authorized  
to seize, condemn  
and destroy cloth-  
ing, etc.

Section 4. Any person who violates any of the provisions of this act, or refuses to comply with any requirements of the Factory Inspector or a Deputy Factory Inspector as provided herein, shall be guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than twenty dollars nor more than fifty dollars for a first offense, and not less than fifty dollars nor more than one hundred dollars for a second offense, or imprisonment for not more than ten days; and for a third offense by a fine of not less than two hundred and fifty dollars and not more than thirty days imprisonment; and it shall also be lawful for the Factory Inspector or any of his deputies, and each and every one of them are hereby authorized and empowered to seize, take charge of, condemn and destroy any or all clothing found that is being made or partially made or manufactured in unhealthy or unsanitary places, or where there are contagious or infectious diseases, in violation of the provisions of this act of Assembly.

Approved—The 28th day of April, A. D. 1899.

WILLIAM A. STONE.

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No. 71.

### AN ACT

To amend section one of the act, entitled "An act relating to mandamus," approved the eighth day of June, one thousand eight hundred and ninety-three; enlarging the power of the court of common pleas of the county in which the seat of government is or may be located to issue of mandamus.

Section 1 of act of  
June 8, 1893, cited  
for amendment.

Section 1. Be it enacted, &c., That section one of the act, entitled "An act relating to mandamus," ap-

proved the eighth day of June, one thousand eight hundred and ninety-three, which reads as follows, to wit: "That the several courts of common pleas shall, within their respective counties, have the power to issue writs of mandamus to all officers and magistrates elected or appointed in or for the respective county, or in or for any township, district or place within such county, and to all corporations being or having their chief place of business within such county; and the court of common pleas of the county in which the seat of government is or may be located shall have the power and it shall be required, to issue the writ of mandamus to the Lieutenant Governor, Secretary of the Commonwealth, Attorney General, Secretary of Internal Affairs, Superintendent of Public Instruction, State Treasurer, Auditor General, Insurance Commissioner, and Commissioners of the Sinking Fund," be amended so as to read as follows:

That the several courts of common pleas shall, within their respective counties, have the power to issue writs of mandamus to all officers and magistrates elected or appointed in or for the respective county, or in or for any township, district or place within such county, and to all corporations being or having their chief place of business within such county; and the court of common pleas of the county in which the seat of government is or may be located shall have the power, and it shall be required, to issue the writ of mandamus to the Lieutenant Governor, Secretary of the Commonwealth, Attorney General, Secretary of Internal Affairs, Superintendent of Public Instruction, State Treasurer, Auditor General, Insurance Commissioner, and Commissioners of the Sinking Fund, the Medical Council of Pennsylvania, and the several Boards of Medical Examiners, the Board of Undertakers, the Board of Dental Examiners, and the Board for the Examination of Accountants for the State of Pennsylvania.

Courts of common pleas shall have power to issue writs of mandamus to officers, magistrates and corporations in respective counties.

Court at seat of government shall issue writs to certain State officers, commissioners and boards.

Approved—The 28th day of April, A. D. 1899.

WILLIAM A. STONE.



## No. 74.

## AN ACT

To amend section four of article eight of an act, entitled "An act relating to bituminous coal mines, and providing for the lives, health, safety and welfare of persons employed therein," approved the fifteenth day of May, Anno Domini one thousand eight hundred and ninety-three, permitting the use of mineral oils in bituminous mines, when used in approved safety lamps.

Section 1. Be it enacted, &c., That section four, article eight of an act, entitled "An act relating to bituminous coal mines, and providing for the lives, health, safety and welfare of persons employed therein," approved the fifteenth day of May, Anno Domini one thousand eight hundred and ninety-three, which reads as follows:

Section 4 of article VIII of act of May 15, 1893, cited for amendment.

"Section 4. No explosive oil shall be used or taken into bituminous coal mines for lighting purposes, and oil shall not be stored or taken into the mines in quantities exceeding five gallons. The oiling or greasing of cars inside of the mines is strictly forbidden unless the place where said oil or grease is used is thoroughly cleaned at least once every day to prevent the accumulation of waste oil or grease on the roads or in the drains at that point. Not more than one barrel of lubricating oil shall be permitted in the mine at any one time. Only a pure animal or pure cotton-seed oil or oils, that shall be as free from smoke as pure animal or pure cotton-seed oil, shall be used for illuminating purposes in any bituminous mine. Any person found knowingly using explosive or impure oil, contrary to this section, shall be prosecuted as provided for in section two of article twenty-one of this act," be and the same is hereby amended to read as follows:

Explosive oil shall not be used except in approved safety lamps.

Oiling or greasing cars inside of mines.

Section 4. No explosive oil shall be used or taken into bituminous coal mines for lighting purposes, except when used in approved safety lamps, and oil shall not be stored or taken into the mines in quantities exceeding five gallons. The oiling or greasing of cars inside of the mines is strictly forbidden unless the

place where said oil or grease is used is thoroughly cleaned at least once every day to prevent the accumulation of waste oil or grease on the roads or in the drains at that point. Not more than one barrel of lubricating oil shall be permitted in the mine at any one time. Only a pure animal oil or pure cotton-seed oil, or oils that shall be as free from smoke as pure animal or pure cotton-seed oil, shall be used for illuminating purposes in any bituminous mine. Any person found knowingly using explosive or impure oil, contrary to this section, shall be prosecuted as provided for in section two of article twenty-one of this act.

Lubricating oil.

Oil for illuminating purposes.

Penalty for using impure oil.

Approved—The 28th day of April, A. D. 1899.

WILLIAM A. STONE.

## No. 79.

### AN ACT.

To protect the public health by prohibiting the sale of goods in second-hand bottles or jars, and providing punishment for the violation of the same.

Section 1. Be it enacted, &c., That on and after the passage of this act, it shall be unlawful for any person or persons, firm or corporation, to put up for sale, offer for sale, or sell any goods or merchandise put up in any bottle or jar that has been used as a package or cover for the same or any other goods. And it shall be unlawful for any person or persons to gather bottles from any place where ashes, garbage or refuse of any kind has been dumped or disposed of, except the same be immediately broken to be sold as cullet: Provided, however, That this act shall not apply to brewers or bottlers engaged in the manufacture and sale of beer, under the laws of this Commonwealth, or to persons engaged in the furnishing and delivery of milk or any medicinal or mineral water, or to the re-filling of prescriptions by doctors or druggists.

Prohibiting the sale of goods in second-hand bottles, etc.

Unlawful to gather bottles where garbage or refuse has been dumped.

Exception.

Not to apply to beer manufacturers and bottlers.

Or to milk dealers, etc.

Section 2. Any person or persons, firm or corporation, violating the provisions of this act shall be deemed guilty of a misdemeanor; and, upon conviction thereof, shall be punished, for the first offense, by a fine of

Violation of act declared a misdemeanor.

Penalty.

Enforcement of  
the act.

not more than twenty-five dollars or by imprisonment in the county jail not more than ten days, and each subsequent offense shall be punished by a fine not to exceed one hundred dollars, or by imprisonment not to exceed three months, or either or both, at the discretion of the court. And it shall be the duty of the Board of Health or any peace officer to enforce the provisions of this act in their respective districts.

Repeal.

Section 3. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Approved—The 28th day of April, A. D. 1899.

WILLIAM A. STONE.

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No. 86.

## AN ACT

To provide for the classification of the townships of the Commonwealth, with respect to their population into two classes, and to prescribe the form of government for townships of each class.

Whereas, In those more populous townships of the Commonwealth, which are in large measure devoted to residential purposes, there is need of a form of municipal government having greater powers than are now possessed by the local governments of townships under existing laws:

Division of town-  
ships into two  
classes.

Section 1. Be it enacted, &c., That for the purpose of legislation regulating their municipal affairs, the exercise of certain corporate powers, and having respect to the number, character, powers and duties of certain officers thereof, the townships now in existence and those to be hereafter created in this Commonwealth shall be divided into two classes. Those townships having a population of at least three hundred to the square mile, as shown by the United States census, shall be townships of the first class. All other townships shall be townships of the second class.

First class.

Second class.

Duty of county  
commissioners.

Section 2. It shall be the duty of the county commissioners in every county of the Commonwealth to ascertain whether any township in the county comes

within the conditions hereinbefore set out as constituting a township of the first class, and by proclamation, to be issued prior to the first day of January, one thousand nine hundred, and thereafter on or before the first day of January following the ascertainment of population by the decennial census of the United States, to designate the townships of the first class, if any, within the county; and in all townships so designated, the officers provided for by this act shall be chosen at the municipal election then next ensuing, and the township government constituted by this act shall go into force on the first Monday of March then next ensuing. Said proclamation by the county commissioners shall be advertised in two newspapers published in the county.

By proclamation to designate townships of the first class.

Elections of municipal officers.

Proclamations to be published.

Section 3. Except so far as modified by the provisions of this act, all existing laws relating to townships shall continue in force until changed, modified or repealed, as to either class of townships, by legislation relating expressly thereto.

Existing laws relating to townships.

Section 4. In townships of the first class the following township officers shall be chosen by the qualified voters at the township election on the third Tuesday in February:

Officers to be chosen third Tuesday of February.

First. In the first year of its organization and in every second year thereafter, five township commissioners, and if the population of the township exceeds five thousand then an additional commissioner for each two thousand of population in excess of five thousand. The said commissioners shall hold office for the term of two years. No township commissioner shall receive any salary or shall be eligible to any other township office.

First and second years, township commissioners.

Term.  
No salary.  
Eligibility.

Second. In the first year of its organization and in every third year thereafter, a township treasurer, who shall hold office for the term of three years.

First and third years, Treasurer.

Third. In the year in which the term of office expires of the township assessor who may be in office at the time of its organization, and in every third year thereafter, a township assessor, who shall hold office for the term of three years, as provided by existing laws.

Assessor.

Fourth. Annually, a township auditor, who shall hold office for a term of three years, as provided by existing laws.

Auditor.

**Official term.**

The official term of the above-named officers shall commence on the first Monday in March and continue until the election and qualification of their successors.

When this act is operative office of supervisor of highways to cease.

Whenever the form of government provided for by this act for townships of the first class becomes operative in any township, the office of supervisor of highways shall cease to exist in such township.

**Township Commissioners.**

Board of township commissioners to make apportionment.

Section 5. On or before the first day of October, in the year of their election, the Board of Township Commissioners, chosen at the first election under the provisions of this act, shall by ordinance make an apportionment of the whole number of township commissioners among the election districts of the township, in proportion to the population as estimated by the vote cast in said districts respectively at the last township election, to the end that thereafter the township commissioners shall be chosen by election districts instead of by vote of the township at large. Any election district having too small a population to be entitled to choose one commissioner shall be combined with some adjoining district. Residence in the district in which he is voted for shall not be a requisite of eligibility for a commissioner.

That thereafter the commissioners may be chosen by election districts.

**Eligibility.**

When new apportionment shall be made.

A new apportionment shall be made after each United States census, and whenever any change is made in the boundaries of the election districts of the township.

Time and place of meeting.

Section 6. The persons elected township commissioners shall meet on the first Monday in March succeeding their election, and until otherwise designated by ordinance the place of meeting shall be the oldest polling place in the township. Each member shall take and subscribe an oath or affirmation, to be administered by a justice of the peace or notary public, to support the Constitution of the United States and of this Commonwealth, and to perform the duties of his office with fidelity. Certificates of such oaths and affirmations shall be filed with the township auditor.

Oath or affirmation.

Certificate of same to be filed.

Power to adjourn.

If a majority of the commissioners shall not attend at the meeting on the first Monday in March those present shall have power to adjourn the meeting, from day to day, until a majority attend.

The Board shall organize by the election of one of their number as president. He shall preside at all the meetings of the Board, and perform such other duties as are specified in this act, or which may be prescribed by ordinance.

Organization of Board.

President, duties of.

The Board shall meet at least once a month, at such time and place as may be designated by ordinance. A majority of the members of the board shall constitute a quorum.

Meetings of Board.

Quorum.

Section 7. All the corporate power, authority and franchise of the township shall be vested in and exercised by the Board of Township Commissioners; and the said Board shall have particularly the following powers:

Powers, authority, etc.

1st. To open, grade, construct and pave all public highways in the township which shall or may be at any time laid out by lawful authority, and to keep the same in good order and repair. To construct footways along said highways, and to establish lights thereon where it may be deemed expedient to do so. To accept the dedication of public highways and alleys.

To grade, pave, light and repair highways, etc.

2d. On application of the owners of a majority of the lineal feet frontage along any highway, or portion thereof, in any village within said township, to cause the sidewalks along said highway to be paved and curbed at the expense of the abutting property.

To pave and curb sidewalks in villages.

3d. To establish a system of sewers and drainage, and to require connection to be made with such sewers when necessary for the public health, and to provide for the cost of the construction, maintenance and repair of such sewers, in whole or in part, by an equitable assessment on the properties benefited thereby, in such manner as may be prescribed by ordinance, for which assessments municipal liens may be filed in the court of common pleas of the proper county, on which proceedings shall be had as provided by existing laws. And the board shall also have power to enter into contracts with any adjoining municipality, and also with any person or corporation, for the carrying off of the sewage from the limits of the township.

To establish a system of sewers and drainage necessary for the public health

To provide for cost and maintenance.

To contract for the carrying off of sewage.

4th. To make regulations respecting pig pens, slaughter houses, manure pits, drains, cess-pools and manufactories that are offensive, to abate nuisances prejudicial to public health and public safety, and to collect the cost of such abatement from any person who

To abate nuisances and regulate the running at large of animals.

may be responsible for having created the nuisance. Also to prohibit or regulate the running at large of animals.

To establish a night-watch and police force.

To provide lockup.

To arrest and confine vagrants

Fire engines.

Regulate circuses and public entertainments.

To levy tax.

To borrow money, etc.

Limit of indebtedness.

Interest, rate of.

No indebtedness shall be incurred except by ordinance.

General authority.

Ordinances to be published.

Fines and penalties.

How to be collected.

5th. To establish and maintain a night watch and police force, and to define the duties of the same. To provide for the erection or purchase of a lockup or watchhouse, for the detention and confinement of vagrants and persons duly arrested, until they can be taken before a magistrate for hearing and committed to prison or discharged. To arrest and confine, or to set to work on the roads or elsewhere, all vagrants found in said township, and generally to take all needful means for securing the safety of persons and property within the township. To purchase and maintain engines for the extinguishment of fire, and to make rules and regulations for the management of the same. To regulate and prohibit shows, circuses and public entertainments of all sorts.

6th. To levy for township purposes an annual tax of not more than one per centum.

7th. To borrow money and to issue evidences of indebtedness therefor: Provided, That the total amount of indebtedness so created shall not exceed two per centum of the county valuation of the property within the township without the assent of the electors of the township, and that the rate of interest shall not exceed five per centum. But no indebtedness shall be incurred or expenditure authorized, except in accordance with the ordinances of the Board, and to authorize the expenditure of more than one hundred dollars a special resolution of the Board shall be necessary.

8th. To adopt by-laws and ordinances prescribing the manner in which the above powers shall be carried out, and generally regulating the affairs of the township within the powers hereby conferred. All such ordinances shall be published at least twice in a newspaper published in the township, or, if there be no newspaper, advertised by publication in such other manner as may be designated by ordinance.

9th. To prescribe fines and penalties, not exceeding ten dollars in any instance, for the violation of township ordinances, which fines and penalties may be collected by suit, to be brought in the name of the town-



ship, before any justice of the peace or magistrate, in like manner as debts of like amount may be sued for by existing laws.

Section 8. All disbursements in discharge of township indebtedness duly incurred, shall be made by the township treasurer, acting by virtue of warrants, or orders, drawn on him by the order of the board of township commissioners, attested by the signature of the president, or vice president, and secretary of the Board. The Board shall prescribe, by ordinance, the manner in which bills for township indebtedness shall be approved for payment.

Disbursements,  
how made.

Approval of bills.

### Highways.

Section 9. It shall be the duty of the board of township commissioners to cause all public highways within the township, now or hereafter laid out by lawful authority, to be effectually opened and constantly kept in repair at all seasons, and clear of all impediments to easy and convenient passing and traveling.

Highways to be  
opened and kept  
clear.

Section 10. The Board shall have power to appoint one or more supervisors or engineers of highways, and by ordinance to specify their duties and to fix their salaries. All such officers shall hold office at the pleasure of the Board. The Board shall cause to be employed a sufficient number of workmen, mechanics and laborers for the proper care of the public roads, and shall have power to purchase all necessary tools, implements, machinery and materials of all kinds which, in their judgment, shall be necessary for the making, paying and repairing of the public highways.

The Board may  
appoint supervi-  
sors or engineers.

And workmen,  
mechanics, etc.

Tools and ma-  
chinery.

Section 11. The board of commissioners shall have power, by their officers and servants, to enter upon any lands or enclosures, to cut, open, maintain and repair all such ditches and drains through the same, as they shall judge necessary, to carry the water from the said roads.

Right of entry.

Section 12. Whenever the owners of property fronting on either side of a public highway in any village in such township shall, by petition request that a sidewalk, with or without curbing, be constructed along that side of said highway between certain points, at the expense of the property owners, and it shall appear that the said petitioners include the owners of a ma-

Owners of prop-  
erty fronting  
highway may pe-  
tition for con-  
struction of side-  
walks.

Majority of own-  
ers of frontage.



To require owners to grade and pave.

And curb if necessary.

If owners neglect, the Board may pave and grade.

Penalty.

majority of the frontage in lineal feet on that side of the highway where the sidewalk is desired, it shall be lawful for the said board of township commissioners, by ordinance duly adopted, to require the owners of property abutting on that side of said highway where the sidewalk is desired between designated points, to grade and pave the sidewalk in front of their respective property in such manner as may in such ordinance be prescribed, and also to curb the same if deemed necessary. And if said owners shall fail to cause such paving and curbing to be done, conformably to the requirements of such ordinance, within sixty days from notice thereof, it shall be lawful for the said board of township commissioners to cause the same to be done, and to collect the cost thereof from the abutting property owners, respectively, in proportion to their frontage. And if the same shall not be paid, to file lien therefor, in the nature of municipal liens against the abutting properties, in the court of common pleas of the county, and to include therein a penalty of twenty per centum on the amount of the cost of the work.

#### Township Treasurer.

Treasurer to give bond, with sureties.

Conditions of bond.

Bond to be filed.

Duty of treasurer.

Annual statement.

Section 13. Each township treasurer shall give a bond, in the sum to be prescribed by ordinance, and at least equal to the probable amount of the annual township tax, with sureties to the satisfaction of the board of township commissioners, which bond shall be conditioned for the faithful performance of the duties of his office, for a just account of all moneys belonging to the township funds that may come into his hands, for the delivery to his successor in office of all papers, books, documents and other things held in right of his office, and for the payment to such successor of any balance in money belonging to the township that may remain in his hands on the settlement of his accounts. All said bonds shall be filed with the township commissioners. It shall be the duty of every township treasurer to take charge of all township moneys, and to keep distinct accounts of all sums received from taxes and other sources, which accounts shall at all times be open to the inspection of the commissioners and township auditor, or any of them. He shall annually state his accounts and lay the same, together

with the books and the vouchers, before the township auditors for settlement according to law.

Section 14. Each township treasurer shall receive, as full compensation for his services, a sum equal to five per centum of all taxes received or collected by him, unless a different rate be fixed by ordinance of the township commissioners, passed thirty days prior to his election.

Compensation of treasurer.

Section 15. Whenever a tax is levied by a board of township commissioners, it shall be the duty of the Board to forthwith deliver a duplicate of the assessment of such tax to the township treasurer, who shall thereby become authorized to receive and collect from the taxpayers the amounts with which they stand charged, respectively, and to give receipts therefor. On receipt of any such duplicates it shall be the duty of the treasurer to give public notice, as soon thereafter as conveniently can be done, by at least ten written or printed notices to be posted in the most public places in the township, and by advertisement in a newspaper published in the township, if any such there be. A discount of five per centum shall be allowed to any taxpayer who shall make payment in sixty days from the time of such notice.

Duplicate of assessment to be delivered to treasurer.

Public notice of duplicate to be given.

Discount to taxpayers.

Section 16. At the expiration of three months from the time of receiving the duplicate of any tax assessed, as aforesaid, the treasurer shall proceed to collect the same from the taxpayers, and to that end may appoint one or more deputy collectors. And said treasurer and his deputies shall have and exercise all powers conferred by existing laws on township tax collectors.

Collection of taxes.

Collectors.

Powers of treasurer and deputies.

Section 17. No money shall be paid out by the township treasurer except on the written order, or warrant, issued by the board of township commissioners and attested by the signatures of the president, or vice president, and the secretary of said board.

Written order, or warrant.

Section 18. The same person may hold the office of township treasurer and treasurer of the school board, but no member of the school board, no township commissioner, or township auditor, shall hold the office of township treasurer, and no township treasurer shall be eligible to succeed himself.

Eligibility of officers, etc.

### Town Clerk.

Town clerk, duties of.

Salary.

Section 19. The board of commissioners shall elect a town clerk, who must be a qualified voter of the township, and not a member of the Board. He shall perform all the duties of town clerk, as prescribed by existing laws; he shall also act as secretary of the Board, shall be the official keeper of the minutes, and shall generally do and perform such duties as may be prescribed by ordinance of the Board. His salary shall be fixed by ordinance.

### Assessor and Auditor.

Section 20. The assessor and auditor, elected as hereinbefore provided, shall perform, respectively, the duties of their office as prescribed by existing laws.

### Townships of the Second Class.

Section 21. Townships of the second class shall continue to be governed as provided by the laws in force at the date of the passage of this act relating to townships, until the same be changed by legislative enactment.

Approved—The 28th day of April, A. D 1899.

WILLIAM A. STONE.

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No. 113.

### AN ACT

Amending section two, section five, section six, section seven, section eight, section eleven, section thirteen, section fifteen, section thirty-seven, section thirty-eight, section thirty-nine, and section forty of an act, entitled "An act creating a bureau of health in the department of public safety in cities of the second class, defining the powers and duties thereof and of the officers thereunder, prescribing rules and regulations and laws respecting the public health, and authorizing and imposing fines, penalties and punishments for violations thereof," approved the twenty-sixth day of June, Anno Domini one thousand eight hundred and ninety-five.

Section 1. Be it enacted, &c., That section two of an act, entitled "An act creating a bureau of health in the department of public safety in cities of the second class, defining the powers and duties thereof and of the officers thereunder, prescribing rules and regulations and laws respecting the public health, and imposing fines, penalties and punishments for violations thereof," approved the twenty-sixth day of June, Anno Domini one thousand eight hundred and ninety-five, and which reads as follows, to wit:

Section 2 of act  
of June 26, 1895,  
cited for amend-  
ment.

"Section 2. It shall be the duty of the said bureau of health to have all things which may have a tendency to imperil the health of the people of said cities removed or corrected as said bureau may deem necessary for the well-being of the people, and if the owner or owners, tenant or occupant of any premises on which such nuisance shall be found shall refuse or neglect, after due notice to remove or correct the same, he, she or they so refusing or neglecting, shall forfeit and pay for every such offense, a penalty not exceeding ten dollars. If any person or persons, firm or corporation, shall cause or permit to be thrown, cast or placed any substance, matter or thing which may tend to endanger the health of the people of such cities on any lot, street, alley, or public place therein, or if any owner or occupant of any lot of ground within said cities shall knowingly or wilfully suffer or permit any such substance, matter or thing as aforesaid to be, lie or remain on such lot, every person so offending shall forfeit and pay a penalty not exceeding ten dollars," shall be and the same is hereby amended to read as follows, to wit:

Section 2. It shall be the duty of the said bureau of health to have all things or conditions which may in their opinion have a tendency to imperil health removed or corrected, as said bureau may deem necessary; and if the agent, owner, owners, tenant or occupants of any premises on or in which such thing or condition shall be found, shall refuse or neglect after due notice to remove or correct the same, he, she, or they so refusing or neglecting, shall for every such offense be subject to all the penalties prescribed in section eleven of this act. If any person or persons, firm, corporation or agent, shall cause or permit to be thrown, cast or placed any offensive substance, matter or thing on any premises, lot, street, alley or public

Bureau of Health  
to remove all  
things imperiling  
health.

Penalties.

place therein, or if any owner, agent or occupant of any lot of ground or premises within said cities shall suffer or permit any such offensive substance, matter or thing aforesaid, to be, lie or remain on such lot or premises, every person so offending shall be subject to all the penalties prescribed in section eleven of this act.

Section 2. That section five of said act, which reads as follows, to wit:

Section 5 cited for amendment.

“Section 5. No person, persons or corporation shall render or try out any dead undressed hogs, cattle, or other animals, or any decayed, putrid or unsound animal matter in the said cities, nor shall it be lawful to carry on any of the above described business within the limits of said cities, without adopting such proper and suitable condensers, or other machinery, as shall prevent unwholesome, foul and disagreeable odors, and as the bureau of health of the cities aforesaid shall approve, nor shall the same be then operated without a permit in writing from the said bureau of health,” shall be and the same is hereby amended to read as follows, to wit:

Rendering and trying out prohibited except under certain conditions.

Section 5. No person, persons or corporation shall render or try out any dead hogs, cattle, or other animals, or animal matter, or any decayed, putrid or unsound animal matter in the said cities, nor shall it be lawful to carry on any of the above described business within the limits of said cities, without adopting and using such proper and suitable machinery, or appliances, as shall prevent foul and disagreeable odors, and as the bureau of health of the cities aforesaid shall approve; nor shall the same be then operated without a permit in writing from the said bureau of health, and in case of the violation hereof the person, persons or corporation so offending shall be subject to all the penalties prescribed in section eleven of this act, and to like penalties for every week said violation shall continue.

Permit in writing.

Section 3. That section six of said act, which reads as follows, to wit:

Section 6 cited for amendment.

“Section 6. If any person or persons shall own, occupy or keep any grounds or other premises in such condition as to be offensive to the neighborhood, he, or they shall be subject to such fine or penalty as is hereinafter provided. Whenever any nuisance shall be found on any premises within the city contrary to any

ordinance of such cities or the provisions of this act, the bureau of health is hereby authorized to cause the same to be summarily abated in such manner as it may direct, and at the expense of the person or persons so offending. It shall be the duty of the said bureau, in all cases where the owner or owners of unoccupied property upon which any offensive matter or substance exists reside out of the said city, or cannot be found after diligent search, to cause the same to be at once removed or abated, and the expense attending the removal or abatement of the same shall be recovered by the said bureau in the name of said cities before any court, police magistrate, alderman, or justice of the peace having jurisdiction of like cases," shall be and the same is hereby amended to read as follows, to wit:

Section 6. If any person or persons shall own, occupy or keep any grounds or other premises in such condition as to be offensive, he or they shall be subject to all the penalties prescribed in section eleven of this act.

Offensive grounds or premises.

Whenever any such nuisance shall be found on any premises within the city contrary to the provisions of this act, the bureau of health is hereby authorized to cause the same to be summarily abated, in such manner as it may direct, and at the expense of the person or persons so offending, and in cases where the owner, owners, agent, or agents of unoccupied property, upon which any offensive matter or substance exists, reside out of the said city or cannot be found after diligent search, to cause the same to be removed or abated, and the expense attending the removal or abatement of the same shall be recovered by the said bureau in the name of said cities before any court, police magistrate, alderman, or justice of the peace having jurisdiction of like cases.

Nuisance to be abated at expense of person offending.

Nuisances on unoccupied property, how abated.

Expense of removal, etc.

Section 4. That section seven of said act, which reads as follows, to wit:

"Section 7. It shall not be lawful for any person to erect or continue any privy, unless the same shall be furnished with a substantial vault at least six feet deep, and made tight, so that the contents cannot escape therefrom, and be sufficiently secured and enclosed; and in case of the violation hereof the person or persons so offending shall be liable to the payment of a fine and penalty not exceeding twenty-five dollars, and which may be enforced for every week the same shall be so continued. If any person shall suffer or

Section 7 cited for amendment

permit any cellar, vault, privy, drain, pool, sewer, or sink upon any premises belonging to or occupied by him to become nauseous, foul, offensive, or injurious to the public health he shall be subject to a fine or penalty not exceeding twenty-five dollars in every case, and to a like fine for every day the same shall continue after notice to remove or abate the same," shall be and the same is hereby amended to read as follows, to wit:

Construction of  
privy.

Section 7. It shall not be lawful for any person to erect or continue any privy, unless the same shall be furnished with a substantial vault, at least six feet deep, constructed of hard, burned brick, laid in cement, with bottom and sides cemented, so as to prevent the contents escaping therefrom, be located at least two feet from the line of the adjoining property, and secured and enclosed; and in case of violation hereof the person or persons so offending shall be subject to all the penalties prescribed in section eleven of this act, and which may be enforced for every week the same shall be so continued. If any person shall suffer or permit any cellar, vault, privy, water closet, drain pipe, pool, sewer, sink, or any plumbing whatever, in or upon any premises belonging to or occupied by him or her, to become foul or offensive, he or she shall be subject to all the penalties prescribed in section eleven of this act, and to like penalties for every day the same shall continue after notice to remove, abate or correct the same. The owner or agent of every building in said cities shall furnish the same with proper and sufficient drainage, underground, to carry off waste water or other sewage, and also with suitable privies or water closets, sufficient for the accommodation of all persons residing or employed therein, and in case of neglect or refusal so to do said owner or agent shall be subject to all the penalties prescribed in section eleven of this act, and to like penalties for every day the said neglect or refusal shall continue after the first conviction.

Penalty.

Foul or offensive  
cellar, vault,  
privy, etc.

Owner or agent  
shall provide  
sufficient drain-  
age, etc.

Penalty.

Section 5. That section eight of said act, which reads as follows, to wit:

"Section 8. Whenever, in the opinion of the said bureau of health, any privy vault shall need cleaning, it shall be the duty of said bureau to notify the owner, agent or occupant, to cleanse the same within a period named in said notice, and unless the person so notified

Section 8 cited for  
amendment.



shall comply within the time mentioned, it shall be the duty of such bureau to cause said vault to be cleansed, and the person so failing to comply with said notice, shall be liable to a fine or penalty not exceeding twenty-five dollars. Nothing in this section shall discharge the owner, agent or occupant of the premises from any liability otherwise provided to pay all the expenses of such cleaning," shall be and the same is hereby amended to read as follows, to wit:

Section 8. Whenever, in the opinion of the said bureau of health, any privy vault shall need cleaning, it shall be the duty of said bureau to notify the owner, agent, or occupant to cleanse the same within a period named in said notice, and if the person so notified shall fail to comply within the time mentioned, said bureau of health is hereby authorized to cause said vault to be cleaned, and the person so failing to comply with said notice shall be subject to all the penalties prescribed in section eleven of this act. Nothing in this section shall discharge the owner, agent or occupant of the premises from any liability otherwise provided to pay all the expense of such cleaning.

Cleaning of privy vault.

Penalty.

Expense, by whom to be paid.

Section 6. That section eleven of said act, which reads as follows, to wit:

"Section 11. It shall be the duty of the bureau of health of each of said cities to cause all offensive or putrid substances, and all nuisances to be removed from the streets, lanes, alleys, highways, wharves, docks, or any other part or parts of the said cities, and to cause such of the privies within the limits aforesaid, to be emptied or corrected at the expense of the individuals who are the owners of the houses to which the said privies are appurtenant, as the said bureau shall from time to time deem necessary for the health of the inhabitants thereof, and if the owners or occupants of the premises on which any offensive or putrid substance or other nuisance may be found, and the owners of the houses to which the said privies are appurtenant, shall on due notice thereof, refuse or neglect to have the same immediately removed, emptied or corrected as aforesaid, he, she or they so refusing or neglecting shall forfeit and pay for every such offense a fine or penalty not exceeding twenty-five dollars, and the expense attending the removal of the same shall be recovered by the said bureau before any alderman, police

Section 11 cited for amendment.



magistrate, or justice of the peace, or in any court having jurisdiction from all corporate bodies and individuals," shall be and the same is hereby amended to read as follows, to wit:

Offensive and putrid substances, and all nuisances to be removed.

At expense of owners of property or occupants.

Penalty for refusal to remove, etc.

Section 11. The bureau of health of each of said cities shall have full power to cause all offensive or putrid substances and all nuisances to be removed, and to cause such of the privies within the limits aforesaid to be emptied or corrected, at the expense of the owners, agents or occupants of the houses to which the said privies are appurtenant, as the said bureau shall from time to time deem necessary; and if the owners, agents or occupants of the premises, on or in which any offensive or putrid substance or other nuisance may be found, and the owners, agents or occupants of the houses to which the said privies are appurtenant, shall on due notice thereof refuse or neglect to have the same immediately removed, emptied or corrected as aforesaid, he, she or they, so refusing or neglecting, shall be subject to all the penalties prescribed in section eleven of this act; and the expense attending the removal, emptying, or correction of the same shall be recovered by the said bureau before any alderman, police magistrate, or justice of the peace, or in any court having jurisdiction, from all corporate bodies and individuals.

Section 7. That section thirteen of said act, which reads as follows, to wit:

Section 13 cited for amendment.

"Section 13. It shall be unlawful for any person, firm or corporation to keep, expose or offer for sale for food, or keep the same for the purpose of sale for food, within the limits of said cities, any emaciated, tainted, putrid, decayed, decaying, unwholesome or diseased meat. In case of keeping, exposing or offering such, the said bureau shall have the power and authority to seize, condemn, and confiscate the same, and also all maimed and diseased animals, or any that may be too young to be used for food. The keeping, offering, exposure, or sale as aforesaid of any emaciated, tainted, putrid, decayed, decaying, unwholesome or diseased meat, or of any maimed or diseased animal or animals too young to be used for food shall be and is hereby declared to be unlawful, and the person so offending shall be subject to a fine of not less than twenty-five nor more than one hundred dollars. The exposure or offer-

ing for sale for food, or keeping for purposes of sale for food, any decayed or unwholesome vegetable, or other matter or thing, is hereby declared to be unlawful, and any person or persons so offending shall be liable to a fine not exceeding one hundred dollars," shall be and the same is hereby amended to read as follows, to wit:

Section 13. It shall be unlawful for any person, firm or corporation to keep, expose or offer for sale for food, or keep the same for the purpose of sale for food, within the limits of said cities, any emaciated, tainted, putrid, decayed, decaying, unwholesome, or diseased meat, game, fish, eggs, or poultry, or any decayed or unwholesome vegetable, fruit, or other matter or thing used for food. In case of keeping, exposing, or offering such for sale, the said bureau shall have the power and authority to seize, condemn, and confiscate the same, and also all maimed and diseased animals, or any that may be too young to be used for food. The keeping, offering, exposure, or sale as aforesaid, of any emaciated, tainted, putrid, decayed, decaying, unwholesome, or diseased meat, game, fish, eggs, or poultry, or any decayed or unwholesome vegetable, fruit, or other matter or thing used for food, or of any maimed or diseased animal, or animals too young to be used for food, shall be and is hereby declared to be unlawful and the person so offending shall be subject to all the penalties prescribed in section eleven of this act. The exposure to sale, after condemnation as aforesaid, of any emaciated, tainted, putrid, decayed, decaying, unwholesome or diseased meat, fish, game, eggs, or poultry, or any decayed or unwholesome vegetable, fruit or other matter or thing used for food, or of any maimed or diseased animal, or animals too young to be fit for food, shall be and is hereby declared to be unlawful, and any person or persons so offending shall be subject to all the penalties prescribed in section eleven of this act.

Tainted or decayed meat, game, fish, eggs, fruit, etc., shall not be offered for sale.

Bureau may condemn and confiscate the same.

Penalty for violation.

Exposure for sale after condemnation unlawful.

Penalty.

Section 8. That section fifteen of said act, which reads as follows, to wit:

"Section 15. It shall be unlawful for any person or persons to offer for sale any milk adulterated with water or other substance, or any milk from diseased cows or goats, and if any person or persons shall violate any of the provisions of this section, he or they

Section 15 cited for amendment.

shall be liable to a fine of not more than fifty dollars for each and every offense so committed," shall be and the same is hereby amended to read as follows, to wit:

Unlawful to offer, sell etc., adulterated milk, or milk from diseased cows or goats.

Penalty.

Bureau may seize, condemn and confiscate.

Section 37 cited for amendment.

Section 15. It shall be unlawful for any person or persons to offer for sale, exchange or delivery, or to have in their custody or possession, with intent to sell, exchange or deliver, or expose or offer for sale or exchange, any milk adulterated with water or other substance, or any milk from diseased cows or goats; and if any person or persons shall violate any of the provisions of this section, he, she or they shall be subject to all the penalties prescribed in section eleven of this act, and, in addition thereto, said bureau of health shall have the power and authority to seize, condemn, and confiscate such milk.

Section 9. That section thirty-seven of said act, which reads as follows, to wit:

"Section 37. Every physician or person practicing midwifery in any of the cities aforesaid, under whose charge or superintence a birth shall hereafter take place, shall keep a true and exact register of such birth, and shall enter the same on a blank schedule to be furnished by the bureau of health, which schedule shall contain a list of the births which have occurred under his or her care during the month, and shall set forth, as far as the same can be ascertained, the full name of each child (if any name shall have been conferred), its sex, color and the full name, occupation of its parent or parents and their birthplaces, the day and place of its birth, and the said schedule shall be delivered, duly signed by the practitioner in the form of a certificate, at the end of each and every quarter, or within ten days thereafter, to the said bureau of health, and in case the birth of any child shall have occurred without the attendance of a physician or practitioner of midwifery, it shall then become the duty of the parent or parents of such child to report its birth to the said bureau of health, in the manner and form and within the period above required," shall be and the same is hereby amended to read as follows, to wit:

Physicians or persons practicing as midwives shall keep a register of births, etc.

Section 37. Every physician or person practicing midwifery in any of the cities aforesaid, under whose charge or superintendence a birth shall hereafter take place, shall keep a true and exact register of such birth, and shall enter the same on a blank schedule to be fur-

nished by the bureau of health, which schedule shall contain a list of the births which have occurred under his or her care during the previous quarter, and shall set forth, as far as the same can be ascertained, the full name of each child (if any name shall have been conferred), its sex, color, and the full name and occupation of its parent or parents, and their birthplaces, the day and place of its birth; and the said schedule shall be delivered, duly signed by the practitioner in the form of a certificate or return, on the first days of January, April, July and October of each year, or within ten days thereafter, to the said bureau of health. In the event of any such physician or person practicing midwifery having no returns to make, it shall be his or her duty to signify the same by delivering a blank certificate or return, duly signed by them, to the said bureau of health on the first day of each and every quarter, as aforesaid, or within ten days thereafter. In case the birth of any child shall have occurred without the attendance of a physician or practitioner of midwifery, it shall then become the duty of the parent or parents of such child to report its birth to the said bureau of health, in the manner and form and within the period above required.

Contents of  
schedule.

Certificate or re-  
turn to be made  
quarterly to Bu-  
reau.

Blank certificate  
and return.

Duty of parents.

Section 10. That section thirty-eight of said act, which reads as follows, to wit:

"Section 38. It shall be the duty of every clergyman, and every magistrate, and of every other person by or before whom any marriage may hereafter be solemnized or contracted, to make a faithful return of the same at the end of each and every quarter, or within ten days thereafter, to said bureau of health in the form of a certificate which shall set forth as far as the same can be ascertained, the full name of the husband, his occupation, the place of his birth, his residence and age, the date of the marriage, the full name of the wife previous to the said marriage and her age, residence and birthplace, the color of the parties, the place where married, the name of the clergyman or other person by whom the marriage ceremony was performed, his residence, the ceremony employed, and the date of the return," shall be and the same is hereby amended to read as followed, to wit:

Section 38 cited  
for amendment.

Section 38. It shall be the duty of every clergyman and every magistrate, and of every other person by or

Returns of mar-  
riages to be made  
quarterly.

Contents of re-  
turn.

Blank certificate.

Penalties for vio-  
lations of sections  
1, 2, 3, 4, 5, 6, 7,  
8, 9, and 10 of this  
act, and sec-  
tions 34, 35 and  
36 of the act to  
which it is a sup-  
plement.

Penalties.

before whom any marriage may hereafter be solemnized or contracted, to make a faithful return of the same on the first days of January, April, July, and October of each year, or within ten days thereafter, to said bureau of health, in the form of a certificate, which shall set forth, as far as the same can be ascertained, the full name of the husband, his occupation, the place of his birth, his residence and age, the date of the marriage, the full name of the wife previous to the said marriage and her age, residence and birth-place, the color of the parties, the place where married, the name of the clergyman, or other person by whom the marriage ceremony was performed, his residence, the ceremony employed, and the date of the return. In the event of any such clergyman, magistrate, or other person as aforesaid, having no returns to make, it shall be his or her duty to signify the same by delivering a blank certificate or return, duly signed by them, to the said bureau of health on the first day of each and every quarter, as aforesaid, or within ten days thereafter.

Section 11. That section thirty-nine of said act, which reads as follows, to wit:

"Section 39. Any violation of, or failure to comply with any of the provisions of sections thirty-four, thirty-five, thirty-six, thirty-seven and thirty-eight of this act, shall subject the person or persons so offending to a penalty not exceeding fifty dollars," shall be and the same is hereby amended to read as follows, to wit:

Section 39. Any and all persons violating or offending against, or failing, neglecting or refusing to comply with, any and all of the provisions of sections one, two, three, four, five, six, seven, eight, nine and ten of this act, and sections thirty-four, thirty-five and thirty-six of the act to which this is a supplement, shall forfeit and pay for every such offense a fine not exceeding one hundred dollars, to be recoverable before any alderman or police magistrate of such cities of the second class, and in default of payment thereof, be imprisoned in the common jail of the county in which such conviction takes place for a period not exceeding thirty days.

Section 12. That section forty of said act, which reads as follows, to wit:

"Section 40. The registry of said marriages, births and deaths shall be kept in separate books, and there shall be general indexes to the record of marriages, births and deaths, which indexes shall also be kept in separate books, and shall at all reasonable times be open to the examination of persons interested therein. Said bureau of health shall be entitled to receive for the use of such city, fifty cents for granting a certificate or certified copy of the record of any marriage, birth or death, which sum shall be paid by the party applying for the certificate or search, but the said register shall at all reasonable times be accessible to physicians, clergymen and lawyers without charge," shall be and the same is hereby amended to read as follows, to wit:

Section 40 cited for amendment.

Section 40. The registry of said marriages, births and deaths shall be kept in separate books, and there shall be general indexes to the records of marriages, births and deaths, which indexes shall also be kept in separate books, and shall at all reasonable times be open to the examination of persons interested therein. The books or registers kept by the bureau of health, or a certificate duly certified by it as containing a copy of the record of any marriage, birth or death, shall hereafter be admitted in any court of the State as prima facia evidence of said marriage, birth or death.

How registers of marriages, births and deaths shall be kept.

To be open for inspection.

The registers or a certified copy of record shall be prima facia evidence of marriage,, birth or death.

Approved—The 2d day of May, A. D. 1899.

WILLIAM A. STONE.

## No. 116.

### AN ACT

To prevent the pollution of the water supply of cities of the first class, being a supplement to an act, entitled "An act to establish a State Board of Health for the better protection of life and health, and to prevent the spread of contagious and infectious diseases in this Commonwealth," approved June three, one thousand eight hundred and eighty-five.

Section 1. Be it enacted, &c., That the State Board of Health shall be and is hereby authorized to ex-

Board of Health authorized to examine water supplied for domestic uses.

amine the water supplied to cities of the first class of this Commonwealth for domestic uses, for the purpose of ascertaining whether said water is free from contamination by human excrement.

Authorized to investigate cause of contamination.

To have right of entry.

Under a warrant.

To adopt measures for removal or abatement of cause.

Board to notify persons, etc., upon whose property contamination exists, to remove or abate the same.

If party notified fail to comply Board of Health to act.

When State Board shall abate nuisances.

Expenses.

Lien may be filed.

Section 2. Should it be ascertained by said examination that the water supplied, as aforesaid, is so contaminated, the said Board is hereby authorized and directed to make such investigation as will ascertain the cause thereof, and whether the water is so polluted and to this end may, by its duly accredited officers or agents, enter upon any property where the cause of said pollution is believed to exist, provided a warrant for said purpose shall first have been obtained from a magistrate or justice of the peace of the county wherein said property is situated, upon an affidavit of an officer or agent of the said Board that there is information or belief of said pollution. And if it shall be found that said pollution is due to the fault or neglect of any person or corporation owning or occupying said property, to thereupon adopt such measures for the removal or abatement of said causes, so that the water supplied, as aforesaid, may be made free from contamination by said excrement.

Section 3. In order to carry out the provisions of the foregoing section, the said Board is hereby authorized and directed to notify, or cause to be notified, every person or corporation upon whose property or in connection with whose business said contamination exists or has its origin, which is found by said Board to pollute the water supplied, as aforesaid, and is thereby a nuisance, to remove or abate the same within a reasonable time, to be stated in said notice. Should the party notified fail to comply with the requirements of said notice, the said nuisance shall be abated by the local board of health, if there be one, under the direction of the said State Board, immediately upon the expiration of the time fixed by said notice. If, however, the local board should neglect or refuse to act with due diligence, or if no such local board should exist, then the said State Board shall cause said nuisance to be abated. All expenses incidental to the abatement of said nuisance shall be charged against the owner or owners of the premises whereon such nuisance exists, and lien may be filed for the work done and material furnished against said premises. In case



of any legal proceedings under this act, the costs shall be ascertained and the liability therefor determined by and made part of the judgment or decree of the court in each case.

Section 4. If, however, the cause of contamination by human excrement is incidental to the conduct of some legitimate business, or of a municipality, and does not amount to a common nuisance, the said Board shall cause a petition to be presented to the court of common pleas of the county in which the said business is carried on, or the municipality is situated, asking for the abatement of the matter complained of, which petition shall set forth fully the causes for such action; and thereupon a citation shall issue to the party or parties complained of, directing them to show cause why the matter complained of should not be abated. The party or parties thus complained of shall file and answer within ten days after the service of the said citation. The matter shall then be proceeded with and heard before the said court of common pleas, in the same manner as injunction proceedings are now conducted, and after a full hearing of the parties and witnesses the court shall make such order as the circumstances demand.

Board may cause petition to be presented to the court.

Asking for abatement.

Citation shall issue.

Answer to be filed within 10 days.

Court shall make order.

Section 5. All expenses incurred by the State Board of Health under this act shall be met from the regular biennial appropriation, to be made by the Legislature for the use of said board.

Expenses of State Board of Health under act.

Section 6. This act shall not be construed to impair or repeal any act or acts applicable to any local board of health, nor shall it impair or repeal any existing provision of law in regard to the pollution of springs, streams, ponds, water-courses, or rivers, or the power and jurisdiction of any court relating to the prevention or removal of such pollution.

Acts or provisions which this act does not repeal or impair.

Approved—The 2d day of May, A. D. 1899.

WILLIAM A. STONE



## No. 121.

## AN ACT

To regulate the sale of butter produced by taking original packing stock and other butter and melting the same, so that the butter oil can be drawn off, mixed with skimmed milk and by emulsion or other process butter, and butter produced by any similar process, and commonly known as "Boiled" or "Process" butter; providing for the enforcement thereof, and punishment for the violation of the same.

Butter which is to be labeled.

Section 1. Be it enacted, &c., That no person, firm, or corporate body shall, within this State, sell, or offer or expose for sale, or have in his, her or their possession with intent to sell, any butter not labeled in compliance with the provisions of this act. Butter produced by taking original packing stock and other butter and melting the same, so that the butter oil can be drawn off, mixed with skimmed milk or other material and by emulsion or other process produce butter, and butter produced by any similar process, and commonly known as "Boiled" or "Process" butter, shall before sale, and before being offered or exposed for sale, and while in the possession of any person, firm or corporate body with intent to sell the same, be plainly labeled "Renovated Butter," in the manner prescribed by this act. If sold, offered or exposed for sale, or in possession of any person, firm or corporate body with intent to sell the same in prints or rolls, the prints or rolls shall be covered by wrappers, on which shall be printed in conspicuous letters the words "Renovated Butter." If packed in tubs or other receptacles, and sold or offered or exposed for sale, or held in the possession of any person, firm, or corporate body with intent to sell the same, the said words shall be printed in one-inch letters on the top and two sides of the tub or receptacle; if uncovered and not contained in a tub or other receptacle, and sold or offered or exposed for sale, or held in the possession of any person, firm, or corporate body with intent to sell the same, a placard containing the said words shall be attached to the mass, in a manner making them plain and prominent.

To be plainly labeled "Renovated Butter."

How it shall be labeled and placarded.

Section 2. Every person, firm, or corporate body who shall violate any of the provisions of this act shall, for every such offense, forfeit and pay not less than twenty-five dollars nor more than one hundred dollars, which shall be recoverable with costs, including expense of inspection and analysis, by any person suing in the name of the Commonwealth, as debts of like amount are by law recoverable: Provided, That the Department of Agriculture, through its officer known as the Dairy and Food Commissioner, together with the deputies, agents and assistants, shall be charged with the enforcement of this act, and shall have full access to all places of business, factories, buildings, carriages, cars, vessels, barrels, and packages of whatever kind, used in the manufacture and transportation and sale of any butter, or of any adulteration or imitation thereof. They shall also have power and authority to open any package, barrel or vessel containing any butter, or any adulteration or imitation thereof, which may be manufactured, sold, or offered or exposed for sale, or held in possession with intent of the holder to sell; and they shall also have full power and authority to take the samples therefrom for analysis, upon tendering the value of said samples. And all charges, accounts and expenses of the Department for the enforcement of this act, through the said commissioner and his deputies, agents, assistants, chemists and counsel employed by him in carrying out the provisions of this act, shall be paid by the Treasurer of the State in the same manner as other accounts and expenses of the said Department are paid. And all penalties and costs for the violation of the provisions of this act shall be paid to the said Dairy and Food Commissioner, or his agents, and by him immediately covered into the State Treasury.

Penalty for violation of act.

Proviso as to the enforcement of the act.

Commissioner and agent, etc., to have access to all places of business, etc.

Power and authority of.

To tender value of samples taken.

Charges and expenses, etc., to be paid by State Treasurer.

Penalties and costs to be covered into State Treasury.

Section 3. Every person who violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for not more than thirty days, or both fine and imprisonment, for the first offense; and a fine of one hundred dollars and imprisonment for thirty days, for every subsequent offense: Provided, That all fines and costs, including the expense of inspection and analysis imposed under

Violation of act declared a misdemeanor.

Penalty.

Proviso.

Forfeiture and  
spoliation.

Jurisdiction of  
magistrates and  
justices.

this section, shall be covered into the State Treasury, as provided by section two of this act; and all butter sold or offered or exposed for sale, or held in the possession of any one with intent to sell the same, in violation of the provisions of this act shall be subject to forfeiture and spoliation.

Section 4. Magistrates and justices of the peace throughout this Commonwealth shall have jurisdiction to hear and determine actions arising for violations of the provisions of this act, and to hold for court or impose the penalties provided therein, subject to appeal as the law shall direct.

Approved—The 4th day of May, A. D. 1899.

WILLIAM A. STONE.

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No. 136.

## AN ACT

To regulate the manufacture and sale of oleomargarine and butterine and other similar products, to prevent fraud and deception by the manufacture and the sale thereof as an imitation of butter, the licensing of manufactures of and dealers in the same, and providing punishment for violations of the act and the means for its enforcement.

Manufacture, sale  
and shipment of  
certain articles,  
products and com-  
pounds prohibited.

Section 1. Be it enacted, &c., That no person, firm or corporate body, by himself, herself or themselves, or by his, her or their agents or servants, shall render or manufacture, sell, ship, consign, offer for sale, expose for sale, or have in his, her or their possession, with intent to sell, any article, product or compound made wholly or partly out of any fat, oil or oleaginous substance, or compound thereof, not produced from unadulterated milk or cream from the same, without the admixture or addition of any fat foreign to the said milk or cream, and which shall be in imitation of yellow butter, produced from pure, unadulterated milk or cream of the same, with or without coloring matter: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale, or offering or exposing for sale, or having in possession with intent

Proviso as to oleo-  
margarine.

to sell, oleomargarine or butterine or any similar substance, free from coloration or ingredients that cause it to look like butter, and in a separate and distinct form, and in such manner as will advise the consumer of its real character, if the person, firm or corporate body who shall manufacture, sell or offer, or expose for sale, or have in his, her or their possession, with intent to sell, any of the said substances, shall first obtain a license, and pay a license fee, as hereinafter provided, and shall in all other respects comply with the provisions of this act.

Shall first obtain a license.

Section 2. It shall be unlawful for any person, firm or corporate body to sell or offer, or expose for sale, or have in possession with intent to sell, oleomargarine, butterine or any similar substance, not marked and distinguished on the outside of each tub, package or parcel thereof, in a conspicuous place, by a placard with the word "oleomargarine" or "butterine," and not having also upon every open tub, package or parcel thereof, in a conspicuous place, a placard with the word "oleomargarine" or "butterine," such placard in each case to be printed in plain, uncondensed gothic letters, not less than one inch long, and such placard shall not contain any other words thereon, and every print or roll shall be wrapped in wrappers plainly stamped on the outside thereof with the words "oleomargarine" or "butterine," and where oleomargarine or butterine or other similar product is sold from solid packages, before being delivered to the purchaser it shall be wrapped by the seller thereof in a wrapper plainly stamped on the outside thereof "oleomargarine" or "butterine," and said wrapper shall contain no other words.

Each package and parcel to be marked and distinguished.

Tub, package, etc.

Print or roll.

Sold from solid package.

Section 3. Every person, firm or corporate body, and every agent of such person, firm or corporate body, who shall manufacture, sell or offer, or expose for sale, or have in his, her or their possession with intent to sell, oleomargarine, butterine or any similar substance, shall first obtain from the Department of Agriculture through its agent, the Dairy and Food Commissioner, a license authorizing him, her or them to engage in the manufacture or sale of oleomargarine or butterine or similar substance, for which said license he, she or they shall pay, if a manufacturer, the annual sum of one thousand dollars; if a wholesaler, the annual sum

Manufacturers and dealers to obtain a license.

License fees.

To be covered into treasury.

Signs to be obtained.

To be hung in a conspicuous place.

Proviso.

Cart, wagons, etc., to be placarded.

Licenses to expire December 31 each year.

Wholesale dealers.

of five hundred dollars; and if a retailer, the annual sum of one hundred dollars; if a restaurant keeper, or a hotel proprietor, the annual sum of fifty dollars; and if a boarding house keeper, the annual sum of ten dollars; and the said license fee when received by the Dairy and Food Commissioner or his agent shall be by him immediately covered into the State Treasury. And after obtaining the license required by this section, before any person, firm or corporate body shall manufacture, sell or offer, or expose for sale, or have in his, her or their possession with intent to sell, oleomargarine or butterine or any similar substance, he, she or they shall be required to procure from the Department of Agriculture, through the Dairy and Food Commissioner, a sign or signs, as the Dairy and Food Commissioner shall determine, which in size and lettering shall be as the Dairy and Food Commissioner shall direct, and shall be uniform throughout the Commonwealth, clearly setting forth that he, she or they are engaged in the manufacture or sale of oleomargarine or butterine or any other similar substance, as the case may be, which said sign or signs, when procured, shall be hung up in a conspicuous place or places on the walls of the rooms or store in which the oleomargarine or butterine or other similar substance is manufactured or sold: Provided, That peddlers and others who may have obtained a license as herein required, and who shall sell, offer or expose for sale, or have in their possession with the intent to sell, oleomargarine or butterine or any similar substance, upon the public streets or ways, may sell or offer or expose for sale, or have in their possession with intent to sell, the same, if the cart, wagon or vehicle, or receptacle in which the oleomargarine or butterine or other substance is contained, is marked or placarded on two sides of the exterior of said vehicle or receptacle in uncondensed gothic letters, not less than four inches in length, with the words "Licensed to sell oleomargarine" or "Licensed to sell butterine," and if they shall in all other respects comply with the provisions of this act. All licenses under this act shall expire on the thirty-first day of December of each year; but licenses may be granted the first of any month for the remainder of a year, upon the payment of a proportionate part of an annual license fee. Wholesale dealers within the meaning of this act, shall be all persons,

firms, and corporate bodies who shall sell to dealers, and persons who shall buy to sell again, and all persons, firms and corporate bodies who make sales in quantities of ten pounds and over at any time; and retail dealers shall be all persons, firms and corporate bodies who shall sell in quantities less than ten pounds. Retail dealers.

Section 4. Every person, firm, or corporate body who shall manufacture, sell or offer, or expose for sale, or have in his, her or their possession with intent to sell, oleomargarine or butterine or any similar substance, in violation of any of the provisions of this act, or who shall in any other respect violate any of its provisions, shall for every such offense forfeit and pay the sum of one hundred dollars, which shall be recoverable, with the costs, including the expense of inspection and analysis, by any person suing in the name of the Commonwealth, as debts of like amount are by law recoverable; and justices of the peace and aldermen throughout this Commonwealth shall have jurisdiction to hear and determine all actions for recovery of penalties, with the right of appeal in either party to the court of common pleas, as provided in existing laws in suits for penalties; and all penalties and costs imposed and recovered under the provisions of this act shall be paid to the Dairy and Food Commissioner or his agent, and by him immediately covered into the State Treasury. Any person, firm or corporation who shall manufacture, sell, offer or expose for sale, or have in his, her or their possession with intent to sell, oleomargarine or butterine or any other similar substance, in violation of any of the provisions of this act, or who shall in any other respect violate any of its provisions, shall also be guilty of a misdemeanor, and upon conviction thereof shall be punished for the first offense by a fine of not less than one hundred dollars nor more than five hundred dollars, and upon his conviction for any subsequent offence shall be punished by a fine not less than one hundred and fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail for not less than ten days nor more than sixty days, or by both fine and imprisonment, at the discretion of the court; and all fines imposed upon any person after con- Violations of act.  
Penalty.  
Justices and aldermen to have jurisdiction.  
Appeal.  
Violation of act a misdemeanor.  
Penalty.  
Fines imposed.

viction shall be paid to the Dairy and Food Commissioner or his agent, and by him paid into the State Treasury.

The commissioner charged with enforcement of act.

Section 5. The Dairy and Food Commissioner shall be charged with enforcement of all the provisions of this act, and shall have the same power to enforce its provisions that is given him to enforce the provisions of the act by which he receives his appointment.

Moneys paid under act to constitute a special fund.

Section 6. The moneys paid into the Treasury under the provisions of this act shall constitute a special fund for the use of the Department of Agriculture in enforcing this law, and may be drawn out upon warrants signed by the Secretary of Agriculture and approved by the Auditor General.

Repeal. conditions of.

Section 7. All acts or parts of acts inconsistent with this act are hereby repealed, but the repeal of said acts is not in any way to interfere with or prevent the prosecution to final termination of any actions, civil or criminal, now pending for violations of said acts.

Approved—The 5th day of May, A. D. 1899.

WILLIAM A. STONE.

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No. 148.

### AN ACT

To allow Medical Colleges of the Commonwealth of Pennsylvania to confer diplomas in public health.

Empowering medical colleges to confer diplomas in public health.

Proviso.

Proviso.

Section 1. Be it enacted, &c., That any medical college chartered by the State of Pennsylvania may confer, after examination, a diploma in public health on any person holding a degree of medicine: Provided, That at least twelve months shall have elapsed between the obtaining of the medical degree and the examinations for the diploma in public health. And provided further, That the candidate shall procure evidence of having attended after receiving his medical degree at least one college year of practical instruction in the laboratory of hygiene connected with one of the medical schools of the State or one of another State recognized as giving equivalent instructions.



Section 2. Examinations shall be upon practical and theoretical hygiene and chemistry, physics, geology and bacteriology, as far as they pertain to hygienic investigations, sufficient to allow the health officer to draw correct conclusions from the reports of experts. Examination.

Approved—The 5th day of May, A. D. 1899.

WILLIAM A. STONE.

### No. 165.

### AN ACT

To provide for the current expenses of the State Board of Health and Vital Statistics, for the two fiscal years commencing the first day of June, one thousand eight hundred and ninety-nine.

Section 1. Be it enacted, &c., That the following sums, or so much thereof as may be necessary, be and the same are hereby specifically appropriated to defray the expenses of the State Board of Health and Vital Statistics, for the two fiscal years commencing the first day of June, one thousand eight hundred and ninety-nine.

For the payment of the salary of the secretary and executive officer, for the two years, the sum of four thousand dollars, or so much thereof as may be necessary. \$4,000 for salary of Secretary and executive officer.

For the employment of necessary clerical aid in the office of the Board, postage, telegrams, express charges, rent, incidental office expenses, traveling, and other necessary expenses of the members and secretary of the Board, while engaged in actual duties of the Board, and for sanitary inspections, abatement of nuisances, control of contagious diseases, protection of water supplies, scientific investigations and analyses, for the two years, the sum of eight thousand dollars, or so much thereof as may be necessary. \$8,000 for clerical aid, postage, traveling expenses, etc.

The amounts expended from the above appropriation shall be distributed by the said Board in accordance with the requirements of the sanitary service of the Commonwealth, and with reference to such emergencies as may arise. Distribution.



How payable.

Said appropriation to be paid upon the warrant of the Auditor General on settlement made by him and the State Treasurer, upon specifically itemized vouchers, certified to under oath by the president and secretary of said Board; and all moneys appropriated under this act remaining unexpended at the close of the two fiscal years shall revert to the State Treasury.

Unexpended balance.

Approved—The 10th day of May, A. D. 1899.

WILLIAM A. STONE.

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No. 267.

### AN ACT

To provide for the investigation of the diseases of domestic animals, and making an appropriation therefor.

Section 1. Be it enacted, &c., That the sum of eight thousand dollars, or so much thereof as may be necessary, be and the same is hereby specifically appropriated out of any money in the treasury not otherwise appropriated, for the purpose of conducting investigations concerning the causes, nature, treatment, and prevention of the diseases of the domestic animals of the Commonwealth of Pennsylvania, with the object of discovering new facts which may be applied advantageously and profitably by the owners of live stock and those engaged in the care, use and rearing of animals.

Under direction of  
Live Stock Sanitary Board.

Section 2. That such investigations shall be made by and under the direction of the State Live Stock Sanitary Board, and the said Board is hereby authorized to provide for and conduct such work of investigation as may be necessary to discover the most efficient, economical and practical means of avoiding and suppressing the diseases of the domestic animals of this Commonwealth, and such work and the practical deductions therefrom shall, upon the order of the Secretary of Agriculture, be published as a part of the annual report of the Department of Agriculture, or as bulletins from said Department.

Publication.

Provided, however, That before any expenses shall be incurred under the provisions of this act, it shall first be approved, in writing, by the Governor, and the Secretary of Agriculture. The said appropriation to be paid upon the warrant of the Auditor General, on the presentation of specifically itemized vouchers, and the written approval of the Governor and Secretary of Agriculture as herein provided.

Proviso as to approval by the Governor and the Secretary of Agriculture.

Approved—The 11th day of May, A. D. 1899.

WILLIAM A. STONE.

## No. 296.

### AN ACT

To establish an emergency fund to be used, as occasion may require, in the suppression of epidemics, prevention of disease, and protection of human life in times of disease and disaster, and making an appropriation therefor; and directing that the unexpended balance of the sum appropriated by the act approved the third day of July, one thousand eight hundred and ninety-seven, shall revert to the State Treasury, and become part of the general fund at the close of the fiscal year ending May thirty-first, one thousand eight hundred and ninety-nine.

Section 1. Be it enacted, &c., That for the two fiscal years beginning June first, one thousand eight hundred and ninety-nine, the sum of fifty thousand dollars be and the same is hereby specifically appropriated and set apart out of any money in the Treasury not otherwise appropriated, for the purpose of creating an emergency fund to be used, as occasion may require, by the State Board of Health in the suppression of epidemics, prevention of diseases, and protection of human life, in times of disease and disaster beyond the relief of individual and organized charity.

Appropriation for emergency fund.

Approved for \$25,000.

The money herein appropriated shall be held in the Treasury of the Commonwealth, and whenever the State Board of Health shall determine that the public health is threatened, either by epidemic or as the result of great disaster, to such an extent that the local

When money is needed, Board of Health shall transmit resolution to Governor, stating amount necessary.

Who shall approve resolution.

To place the same with Treasurer of State Board of Health.

Balance shall be returned to State Treasurer.

Itemized statement and vouchers.

Unexpended balance.

authorities and individual and organized charity are unable to meet the emergency, they shall pass a resolution to that effect, stating all the facts in the case and the reasons for considering that State aid is needed, and to what amount, and transmit the same to the Governor. If the resolutions and the reasons therein set forth shall meet with the approval of the Governor, Auditor General and State Treasurer, they shall so certify and file the resolutions and certificate of approval in the office of the Auditor General, for the amount approved by the Governor, Auditor General and State Treasurer, and place the same in the hands of the Treasurer of the State Board of Health, to be used for the purpose set forth in the resolution as aforesaid, and for no other purpose. If after the said epidemic shall have been suppressed, or the sickness or danger averted, there shall be a balance of the amount drawn left in the hands of the Treasurer of the State Board of Health, he shall, without delay, return the same to the State Treasurer, and it shall become a part of the said emergency fund. He shall also file with the Auditor General a specifically itemized statement, made under oath, and accompanied by proper vouchers of the expenditures of said moneys as soon as possible. The unexpended balance of the money herein appropriated shall revert to the State Treasury at the close of the two fiscal years.

May 12, 1899.—This bill is approved for \$25,000. I withhold my approval from \$25,000 for the reason that in the past two years not one-half of the amount aforesaid was used and I can see no reason why, during the next two years, it will be necessary to use more than half of this appropriation. This reduction has been agreed to by paper duly executed and filed by the Governor, the Auditor General and the State Treasurer, who constitute the Emergency Board, and I, therefore, withhold my approval of the sum of \$25,000, as per said release filed in the office of the State Treasurer.

WILLIAM A. STONE.

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APPENDIX O.  
ADDITIONS TO LIBRARY.

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List of Books Received from November, 1898, to November, 1899, by  
Gift or Exchange.

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- Report of the State Board of Health of New Hampshire, 1897-1898. Irving A. Watson, M. D.
- Annual Report State Board of Health of Indiana, 1896-1897. J. N. Hurty, M. D.
- The Vital Statistics of Massachusetts, 1896. Samuel W. Abbott, M. D.
- Biennial Report of the Department of Health of Chicago, 1895-1896. Wm. R. Kerr.
- Metropolitan Board of Health, city of New York. Vols. for the years 1872, 1874-75, 1876-77, 1878-79, 1889, 1892, 1893, 1894, 1895, 1896. Emmons Clark.
- Twentieth Annual Report of the State Board of Health of Connecticut, 1897. C. A. Lindsley, M. D.
- Health Department of the city of New York, Vital Statistics, 1878-1879.
- Health Department of the city of New York, Vital Statistics, 1876, 1877. Emmons Clark.
- Twentieth Annual Report of the State Board of Health of Illinois, Appendix, 1897.
- Twenty-first Annual Report of the Board of Health of Lowell, Mass., 1898. Thomas J. Mulligan.
- Annual Report Board of Health of Cambridge, Mass. 1898.
- Sixteenth Annual Report City of Providence, R. I. 1898.
- Bulletin No. 41. Department of Agriculture, Penna. Thomas J. Edge.
- Twenty-eighth Annual Report of the Board of Commissioners of Public Charities of Pennsylvania. Cadwalader Biddle.
- Pennsylvania Report of the Attorney General, 1895-1896. Wilbur F. Reeder.
- Seventeenth Annual Report of the State Board of Health of Wisconsin, 1897-1898. U. O. B. Wingate, M. D.
- Transactions of the American Institute of Homeopathy, Omaha Session. Eugene H. Porter, M. D.
- Fourth Annual Report of the Board of Health of the Province of Quebec. Elzear Pelletier, M. D.
- Medical Communications of the Massachusetts Medical Society.
- Report of the Board of Public Health of Victoria, Australia, 1896-97. J. W. Colville.
- U. S. Experiment Station Record, 1899. A. C. True, Ph. D.
- Fifth Annual Report of Births, Marriages and Deaths in Maine, 1896. A. G. Young, M. D.
- Congres National D'Hygiene et de Climatologie Medical de La Belgique et du Congo. 1898.
- Bulletin de la Societe Royale de Medecine Publique. Belgique. 1898.

- Report of the Filtration Commission of Pittsburgh. 1899. Crosby Gray.
- Annual Report of the State Board of Health of Minnesota. 1895-8. Chas. N. Hewitt, M. D.
- Annual Report of the Board of Health of Asbury Park, N. J. 1898. D. C. Bowen.
- Annual Report of the Bureau of Health of Philadelphia. 1897. J. J. McCarthy.
- Documents Relating to Pollution of Schuylkill River, Bureau of Water, Phila., 1898. J. C. Troutwine, Jr.
- Annual Report State Board of Health of Florida. 1899. J. Y. Porter, M. D.
- Report of Health Officer, District of Columbia, 1898.
- Annual Report Bureau of Health of Pittsburgh, 1898. Crosby Gray.
- Weekly Public Health Reports, Surgeon General, U. S. M. H. S., 1898. Surgeon General.
- Annual Report of the State Board of Health of Connecticut, 1898. C. A. Lindsley, M. D.
- Annual Report of the State Board of Health of New Jersey, 1898. Henry Mitchell, M. D.
- Annual Report of the State Board of Health of Rhode Island, 1896. Gardner T. Swarts, M. D.
- Forty-fifth Registration Report of Rhode Island, 1897. Gardner T. Swarts, M. D.
- Report of the Health of the City of Birmingham, England, 1898. A. Hill, M. D.
- Transactions of Iowa State Medical Society. Vol. XVI. J. W. Cokenower, M. D.
- Experiment Station Record. Vol. No. X. A. C. True, Ph. D.
- Farmer's Bulletin No. 92 and 93. A. C. True, Ph. D.
- Biennial Report of the Louisiana State Board of Health. S. R. Olliphant, M. D.
- Report of Surgeon General of the Army. 1898. George M. Sternberg, M. D.
- Annual Report of the Health Department of Baltimore. 1898. A. K. Hadel.
- Annual Report of the State Veterinarian of Pennsylvania. L. Pearson, M. D.
- Annual Report of the Board of Directors of the Philadelphia Maritime Exchange. E. R. Sharwood.
- Louisiana State Board of Health, Sanitary Code. 1899. E. Souchon, M. D.
- Annual Report of the Supervising Surgeon General U. S. M. H. S. 1898. Walter Wyman, M. D.
- Gabriel Upton vs. City of Philadelphia. In the Supreme Court of Pennsylvania. J. L. Kinsey, City Solicitor.
- Annual Report of the Public Health Division of Cleveland, Ohio.
- Water Supply and Sewerage. Senate No. 4, Mass. Samuel W. Abbott, M. D.
- Elements of Sanitary Engineering, Merriman. Mansfield Merriman.
- Annual Report of Births, Marriages and Deaths in Providence R. I. Chas. V. Chapin, M. D.
- Report of North Carolina Board of Health. 1897-98. R. H. Lewis.
- The Quarterly Journal of Inebriety. T. D. Crothers, M. D.
- Memoria Casa De Orates de Santiago de Chill. Pedro Moutt.
- Relative applicability of Sand and Mechanical Filters. George W. Fuller.
- Articles on Asthenia, Micro-organismal Diseases, Bacteria in Milk. Reprinted from Bureau of Animal Industry. Chas. F. Dawson, M. D.
- Fifteenth Annual Report of Bureau of Animal Industry. 1898. U. S. Department of Agriculture.
- Report of the Water Supply of Philadelphia. By R. Hering, J. M. Wilson, S. M. Gray, Commissioners. Samuel H. Ashbridge.
- Maine Registration Report. 1897. A. G. Young, M. D.
- Train Inspection in Yellow Fever Epidemics. H. R. Carter, U. S. M. H. S.
- Shipment of Merchandise from Yellow Fever Districts. H. R. Carter, U. S. M. H. S.

**Mortality Statistics in U. S. 1897.**

**Report of Commissioners of Medical Officers on the Cause of Yellow Fever.**  
**Treasury Department.**

**Yellow Fever, its Nature, Diagnosis, Treatment and Prophylaxis.** Supervising  
**Surgeon General.**

**Experiment Station Record.**

**Transactions of Maine Medical Association. 1899. Chas. W. Smith.**

**Year Book of the Department of Agriculture. 1898. J. M. Rusk.**

**Annual Report of the Health Department of San Francisco, California. J. J.**  
**Dunne.**

**Fourteenth Annual Report of the State Board of Health of Kansas. 1898. H. Z.**  
**Gill, M. D.**

**Seventeenth Annual Report of the Provincial Board of Health of Ontario. 1898.**  
**J. D. McDonald.**

**Transactions New York State Medical Association. 1898. M. C. O'Brien, M. D.**  
**Report of the Commission of Health of Milwaukee. 1899. F. M. Schulz, Ph. G.,**  
**M. D.**

**Registration Reports of Vital Statistics of Michigan for the years 1876, 1877, 1878,**  
**1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1891, 1894, 1896. Cressy**  
**L. Wilbur.**

**Communicable Diseases in Michigan. 1893. Cressy L. Wilbur.**

**Communicable Diseases in Michigan. 1894. Cressy L. Wilbur.**

**Communicable Diseases in Michigan. 1895. Cressy L. Wilbur.**

**Communicable Diseases in Michigan. 1896. Cressy L. Wilbur.**

**Proceedings and Addresses at Sanitary Conventions at Hastings, Michigan, 1888;**  
**Miles, 1891; Iron Mountain, 1891; Holland, 1892; Charlotte, 1894; Union City,**  
**1894; Hanover, 1897; Tawas City, 1898. Henry B. Baker, M. D.**

**Annual Conference of Health Officers in Michigan, 1894 and 1896. Henry B.**  
**Baker, M. D.**

**Meteorological Conditions in Michigan. 1895. Henry B. Baker, M. D.**

**Relation of Certain Meteorological Conditions to Diseases of the Lungs in Colo-**  
**rado. Henry B. Baker, M. D.**

**Greatest Prevalence of each Disease in Michigan in 1896. Henry B. Baker, M. D.**

**Michigan Canadian Inspection of Immigrants. Henry B. Baker, M. D.**

**Causation of Influenza and Allied Diseases. Henry B. Baker, M. D.**

**Sickness Statistics. Henry B. Baker, M. D.**

**Weekly Reports of Diseases in Michigan. 1879. Henry B. Baker, M. D.**

**Etiology and Pathology of Typhoid Fever. Henry B. Baker, M. D.**

**Michigan Laboratory of Hygiene. 1888. Henry B. Baker, M. D.**

**Small-pox in Michigan. Henry B. Baker, M. D.**

**Quarter Centennial Celebration of the Michigan State Board of Health, 1873-1898.**  
**Henry B. Baker, M. D.**

**A Quarter Century of Public Health in Michigan. Henry B. Baker, M. D.**

**Criminal Abortion, Michigan. Henry B. Baker, M. D.**

**Patent Medicines. Henry B. Baker, M. D.**

**Toxines and Antitoxines. Henry B. Baker, M. D.**

**Diphtheria, Scarlet Fever and other Dangerous Communicable Diseases. Henry**  
**B. Baker, M. D.**

**Restriction and Prevention of Communicable Diseases. Henry B. Baker, M. D.**

**The Duties of the Local Health Officer. Henry B. Baker. M. D.**

**The Needs for and Value of Public Health Work. Henry B. Baker, M. D.**

**Eyesight and Hearing, by Leartus Connor, A. M., M. D., Henry B. Baker, M. D.**

**Ventilation of R. R. Cars, by Pros. R. C. Kedzie, M. D., Henry B. Baker, M. D.**

Report of the Filtration

Annual Report

Hewitt, M.

Annual Report

Annual Report

Documents

1898.

Annual

Report

Ann

We

A

STATE BOARD OF HEALTH

Report of the Filtration in Michigan. Henry B. Baker, M. D.

Annual Report. Henry B. Baker, M. D.

Annual Report. Henry B. Baker, M. D.

Documents. Henry B. Baker, M. D.

1898. Henry B. Baker, M. D.

Annual Report. Henry B. Baker, M. D.

Ann. Henry B. Baker, M. D.

We. Henry B. Baker, M. D.

A. Henry B. Baker, M. D.

How Diseases are Contracted and Communicated, by R. C. Kedzie, H. B. Baker, M. D.

Personal Duties and Responsibilities of the people for the Preservation of the Public Health. Rev. H. P. Collin, H. B. Baker, M. D.

How Diseases are Contracted and Communicated, by R. C. Kedzie, H. B. Baker, M. D.

Water Supply of Owosso, by S. E. Parkill, H. B. Baker, M. D.

Pollution of Water Supplies, American Public Health Association, 1888. Henry B. Baker, M. D.

Twenty-one Circulars and Addresses on Health Subjects. Henry B. Baker, M. D.

Infantile Mortality. Henry B. Baker, M. D.

#### List of Journals and Bulletins.

The Journal of the American Public Health Association. Subscription.

The Journal of the American Medical Association, Chicago, Ill. Subscription.

New England Medical Monthly, Danbury, Conn.

The Sanitarian, Brooklyn, N. Y. Subscription.

The Journal of Comparative Medicine and Veterinary Archives, Philadelphia, Pa. Subscription.

Medical and Surgical Reporter, Philadelphia.

Experiment Station Record, Washington, D. C.

Pennsylvania State College Bulletin, State College, Pa.

Tennessee State Board of Health Bulletin, Nashville Tenn.

Official Monthly Report of the Department of Health of Milwaukee, Wis.

Report of the State Weather Bureau of Pennsylvania, Philadelphia, Pa.

Iowa State Board of Health Bulletin, Des Moines, Iowa.

Monthly Report of the Board of Health, Rochester, N. Y.

Official Monthly Report of the Bureau of Health of Denver, Colorado.

Monthly Report of the Department of Public Health, Buffalo, N. Y.

Weekly Report of the Health Department of New York, N. Y.

Weekly Returns of Births and Deaths in London, England.

The Sanitary Inspector. Official Bulletin of the State Board of Health of Maine, Augusta, Me.

Quarterly Returns of Births, Deaths and Marriages in England and Wales, London, Eng.

Lehigh Valley Medical Magazine, Easton, Pa.

The Pennsylvania Medical Journal, Pittsburgh, Pa.

Buffalo Medical Journal, Buffalo, N. Y.

Public Health, Philadelphia, Pa., Subscription.

Philadelphia Medical Journal, Philadelphia Exchange.

The Medical Mirror, St. Louis Missouri, Exchange.

Weekly Abstract of Sanitary Reports, Washington, D. C.

APPENDIX P.

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TWELFTH ANNUAL REPORT  
OF THE  
State Pharmaceutical Examining Board  
OF  
PENNSYLVANIA,  
FOR THE YEAR ENDING JANUARY 31, 1900.

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Transmitted to the Governor August 3, 1900.

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Harrisburg, Pa., August 13, 1900.

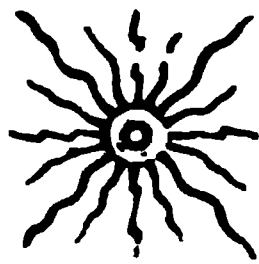
To His Excellency, William A. Stone, Governor:

Sir: In compliance with the provisions of section 4 of the "Act to regulate the practice of pharmacy and sale of poisons, and to prevent the adulterations in drugs and medicinal preparations in the State of Pennsylvania," approved May 24, 1887, I have the honor to transmit the Twelfth Annual Report of the Board for the year ending January 31, 1900.

Very respectfully yours,

CHARLES T. GEORGE,  
Secretary.





**MEMBERS OF THE BOARD.**

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**LOUIS EMANUEL, Ph. G. Phar. D., President, Pittsburgh, Pa.**  
**CHARLES T. GEORGE, Ph. M., Secretary, Harrisburg.**  
**HENRY C. PORTER, Ph. G., Treasurer, Towanda.**  
**GEORGE W. KENNEDY, Ph. G., Pottsville.**  
**FELIX A. BOERICKE, M. D., Philadelphia.**



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## REPORT.

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Heretofore it has been customary for the Secretary to confine his report to the operations of the Board for one year, or for the four quarterly examinations, the year 1899 however being the year for the tri-annual renewal of registration, it was deemed necessary to give the fullest list possible of all those who have been registered, and who have paid the renewal fees up to date, so as to make it possible for the registered pharmacists in the State to know who are practicing pharmacy without being lawfully registered.

The accompanying list of registered pharmacists and registered qualified assistant pharmacists is complete and accurate to January 31, 1900, and therefore includes the report for the last seven quarterly examinations.

The first meeting of the Board for the examination of applicants for registration was held at Williamsport, July 12, 1898. At this meeting 103 persons presented themselves for examination, 62 for registered pharmacists' certificates and 41 for registered qualified assistant pharmacists' certificates, 13 of the first class and 22 of the second class passed a creditable examination and were registered accordingly.

The second examination of the Board was held at Pittsburgh and Philadelphia on Saturday, October 8, 1898. Fifty-four applicants were examined at the Pittsburgh meeting, 29 for registered pharmacist's certificate, and 25 for registered qualified assistant pharmacists' certificates, 8 of the first class and 18 of the second class succeeded in passing the examination and were registered.

One hundred and fifty-five applicants were examined at the Philadelphia meeting, 89 for registered pharmacists' certificates and 66 for registered qualified assistant pharmacists' certificates, of this number 16 of the first class and 44 of the second class succeeded in passing the examination successfully and were registered.

The third meeting of the Board was held in Philadelphia January 14, 1899. Two hundred and sixty-two persons were examined at this meeting, 143 for registered pharmacists' certificates and 119 for registered qualified assistants' certificates; 43 of the first class and 68 of the second class passed a successful examination and were registered.

The fourth quarterly meeting of the Board was held at Pittsburgh and Harrisburg April 15, 1899.

One hundred and twenty-seven applicants were examined at Pittsburgh, 63 for registered pharmacists' certificates and 64 for registered qualified assistants' certificates, 23 of the first class and 41 of the second class succeeded in passing successfully and were registered.

One hundred and eighty-four applicants were examined at the Harrisburg meeting, 119 for registered pharmacists' certificates and 65 for registered qualified assistants' certificates; 61 of the first class and 39 of the second class succeeded in passing a successful examination and were registered.

The fifth quarterly meeting of the Board for the examination of applicants for registration was held at Williamsport July 11, 1899. Ninety-four applicants were examined at this meeting, 59 for registered pharmacists' certificates and 35 for registered qualified assistants' certificates; of this number 20 of the first class and 15 of the second class succeeded in passing a successful examination and were registered.

The sixth quarterly examination was held at Philadelphia and Pittsburgh October 14, 1899. Two hundred and eighty-six persons were examined at these meetings, 97 at Pittsburgh and 189 at Philadelphia; of this number 163 applied for registered Pharmacists' certificates and 123 for registered qualified assistants' certificates; 53 of the first class and 40 of the second class passed a creditable examination and were registered.

The seventh quarterly examination was held at Philadelphia January 20, 1900. At this meeting of the Board 312 persons presented themselves for examination, 170 for registered pharmacists' certificates and 142 for registered qualified assistants' certificates; of this number 99 of the first class and 109 of the second class succeeded in passing a satisfactory examination and were registered.

The total number of applicants examined during the past 21 months was 1,577; of this number 729 succeeded in passing a satisfactory examination for registered pharmacists' certificates and for registered qualified assistant pharmacists' certificates the percentage of successful candidates being less than 50 per cent., the entire number of registered pharmacists passed in the nearly two years was only 336 or about 20 per cent. of the total number examined, giving evidence of careful sifting, and an assurance to the public that those who receive certificates of competency from the Board are safe and reliable persons.

The annual report of the Treasure of the Board, Mr. Henry C. Porter, of Towanda, Pa., showing a balance of \$3,141.71 in his hands July 8, 1899, is herewith submitted.

Very respectfully yours,

CHARLES T. GEORGE.

Secretary.

REPORT OF THE TREASURER.

Towanda, Pa., July 8, 1899.

Henry C. Porter, Treasurer, in Account with State Pharmaceutical  
Examining Board of Pennsylvania:

| 1898.   | Debit.     |            |
|---|------------|------------|
| July 1, To balance last audit, .....            | \$3,761 06 |            |
| July 7, To cash from C. T. George, Secretary,   | 150 00     |            |
| July 12, To cash from C. T. George, Secretary,  | 324 00     |            |
| Sept. 16, To cash from C. T. George, Secretary, | 276 00     |            |
| Oct. 8, To cash from C. T. George, Secretary,   | 633 00     |            |
| 1899.   |            |            |
| Jan. 10, To cash from C. T. George, Secretary,  | 521 00     |            |
| Jan. 14, To cash from C. T. George, Secretary,  | 795 00     |            |
| April 14, To cash from C. T. George, Secretary, | 140 70     |            |
| April 15, To cash from C. T. George, Secretary, | 348 30     |            |
| April 17, To cash from C. T. George, Secretary, | 960 00     |            |
| July 8, To cash from C. T. George, Secretary,   | 939 00     |            |
|   |            | \$8,848 06 |

| 1898.                               | Credit. |  |
|-------------------------------------|---------|--|
| Sept. 16, By voucher No. 314, ..... | \$92 25 |  |
| Sept. 16, By voucher No. 315, ..... | 179 00  |  |
| Sept. 16, By voucher No. 316, ..... | 139 65  |  |
| Sept. 16, By voucher No. 317, ..... | 316 41  |  |
| Sept. 16, By voucher No. 318, ..... | 238 00  |  |
| Sept. 16, By voucher No. 319, ..... | 30 00   |  |
| Sept. 16, By voucher No. 320, ..... | 31 35   |  |
| Sept. 16, By voucher No. 321, ..... | 276 00  |  |
| Nov. 24, By voucher No. 322, .....  | 90 49   |  |
| 1899.                               |         |  |
| Jan. 10, By voucher No. 323, .....  | 192 70  |  |
| Jan. 10, By voucher No. 324, .....  | 148 10  |  |
| Jan. 10, By voucher No. 325, .....  | 130 50  |  |
| Jan. 10, By voucher No. 326, .....  | 19 00   |  |
| Jan. 10, By voucher No. 327, .....  | 342 36  |  |
| Jan. 10, By voucher No. 328, .....  | 409 15  |  |
| April 15, By voucher No. 329, ..... | 55 00   |  |
| May 1, By voucher No. 330, .....    | 55 00   |  |

|                                     |          |             |
|-------------------------------------|----------|-------------|
| April 15, By voucher No. 331, ..... | 125 25   |             |
| April 15, By voucher No. 332, ..... | 520 30   |             |
| April 15, By voucher No. 333, ..... | 333 95   |             |
| April 15, By voucher No. 334, ..... | 348 30   |             |
| April 17, By voucher No. 335, ..... | 136 50   |             |
| May 1, By voucher No. 336, .....    | 50 00    |             |
| May 10, By voucher No. 337, .....   | 18 75    |             |
| July 8, By voucher No. 338, .....   | 152 00   |             |
| July 8, By voucher No. 339, .....   | 184 45   |             |
| July 8, By voucher No. 340, .....   | 430 45   |             |
| July 8, By voucher No. 341, .....   | 176 94   |             |
| July 8, By voucher No. 342, .....   | 339 00   |             |
| July 8, By voucher No. 343, .....   | 145 50   |             |
| July 8, By balance on hand, .....   | 3,141 71 |             |
|                                     | <hr/>    | \$8,848 06  |
|                                     |          | <hr/> <hr/> |

Audited July 18, 1899, and found correct.

F. A. BOERICKE.  
E. A. CORNELL.

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Condensed Statement of the Expenditures of the State Pharmaceutical Examining Board of Pennsylvania, from July 1, 1898, to July 8, 1899, both inclusive:

|   |          |             |
|---|----------|-------------|
| Lawyers' fees and court costs, .....          | \$312 00 |             |
| Detective fees, .....                         | 295 89   |             |
| Analytical chemists' fees, .....              | 85 00    |             |
| Stationery and printing, .....                | 193 99   |             |
| Postage, telegraph and telephone, .....       | 150 60   |             |
| Freight and express, .....                    | 19 45    |             |
| Janitors and help, .....                      | 80 00    |             |
| Premium Treas. Board, .....                   | 18 75    |             |
| Specimens, .....                              | 60 00    |             |
| Secretary, salary and help, .....             | 550 00   |             |
| Railroad, hotel and incidental expenses, .... | 1,695 67 |             |
| Louis Emanuel, 129 days' services, .....      | 645 00   |             |
| Chas. T. George, 79 days' services, .....     | 395 00   |             |
| E. A. Cornell, 78 days' services, .....       | 390 00   |             |
| F. A. Boericke, 84 days' services, .....      | 420 00   |             |
| Henry C. Porter, 79 days' services, .....     | 395 00   |             |
|   | <hr/>    | \$5,706 35  |
|   |          | <hr/> <hr/> |



## REGISTERED PHARMACISTS.

---

Abell, Wm. W., .....Third & York, .....Philadelphia.  
 Aber, Leonidas, .....White Ash, .....Allegheny county.  
 Achey, Fredk. A., .....East Petersburg, .....Lancaster county.  
 Achre, Cyrus J., .....Greenville, .....Mercer county.  
 Acker, Louis K., .....2513 Carson, .....Pittsburgh.  
 Ackerman, A. K., .....Turbotville, .....Northumberland county  
 Acomb, James L., .....Tidioute, .....Warren county.  
 Adams, Frank A., .....153 E. 16th, .....Erie.  
 Adams, James D., .....10th & Spruce, .....Philadelphia.  
 Adams, W. Scott, .....428 N. 5th, .....Reading.  
 Adamson, Thos. H., .....Cochranton, .....Crawford county.  
 Addis, Simon D., .....South Bethlehem, .....Northampton county.  
 Agnew, Edwin I., .....Wampum, .....Lawrence county.  
 Agrelius, John W., .....Youngsville, .....Warren county.  
 Alchner, Otto C., .....Erie, .....Erie.  
 Aiken, Albert J., .....New Castle, .....Lawrence county.  
 Aiken, James, .....Berwyn, .....Chester county.  
 Aitken, John W., .....Carbondale, .....Lackawanna county.  
 Aitken, T. Benton, .....West Chester, .....Chester county.  
 Akers, Frank L., .....1106 11th street, .....Altoona.  
 Albison, Fred. W., .....2002 Tioga, .....Philadelphia.  
 Albright, Franklin P., ...Franklin & Berks, .....Philadelphia.  
 Aldenderfer, Chas. D., ...Greenville, .....Mercer county.  
 Aldinger, C. D., .....Butler, .....Butler county.  
 Alexander, Chas. E., .....York, .....York county.  
 Alexander, Wm. A., .....Everett, .....Bedford county.  
 Alexander, Wm. B., .....Reynoldsville, .....Jefferson county.  
 Alleman, E. A., .....West Milton, .....Northumberland county.  
 Alleman, Frank, .....34th & Pine, .....Philadelphia.  
 Allen, J. Harry, .....700 7th ave., .....Altoona.  
 Allis, Irving M., .....Wyalusing, .....Bradford county.  
 Allison, Elmer W., .....Indiana, .....Indiana county.  
 Allison, Robert L., .....Eau Claire, .....  
 Allison, Robert W., .....Wilkesburg, .....Allegheny county.  
 Alcentzer, Chas. F., .....Thurlow, .....Delaware county.  
 Altenburger, Ulrich, .....172 Ohio, .....Allegheny.  
 Alter, Geo. W., .....Blairsville, .....Indiana county.  
 Althouse, Frank J., .....13th & Market, .....Harrisburg.  
 Althouse, Harry B., .....13th & Market, .....Harrisburg.  
 Altman, Wm. H., .....Punxsutawney, .....Jefferson county.  
 Ames, Newton F., .....Corry, .....Erie county.  
 Amiss, Thos. C., .....5th & Elm, .....Camden, N. J.  
 Ammon, Geo. W., .....311 Penn, .....Reading.  
 Ammon, Jacob S., .....311 Penn, .....Reading.

Ancona, Chas. P., .....307 High, .....Pottstown.  
 Ancona, Edward P., ....307 High, .....Pottstown.  
 Ancker, Louis, .....1410 Chestnut, .....Philadelphia.  
 Anderson, Atchison C., ..Butler, .....Butler county.  
 Anderson, Geo. C., .....1744 N. 21st, .....Philadelphia.  
 Anderson, Geo. H., .....Arnold, .....Westmoreland county.  
 Anderson, Geo. R., .....Easton, .....Northampton county.  
 Anderson, Harry H., .....Manayunk, .....Philadelphia.  
 Andes, John B., .....Honey Brook, .....Chester county.  
 Andrews, Geo. W., .....Delta, .....York county.  
 Andrews, Willard C., ....1340 Green, .....Philadelphia.  
 Andrews, Wm. K., .....Mill Village, .....Erie county.  
 Andreissen, Fred., .....319 Perryville ave., .....Allegheny.  
 Andreissen, Hugo, .....Beaver, .....Beaver county.  
 Angle, Jay W., .....8th & Green, .....Philadelphia.  
 Angney, Joseph S., Jr., ..Ambler, .....  
 Anhalt, Herman, .....5812 Ashland ave., .....Philadelphia.  
 Anspach, Paul B., .....Easton, .....Northampton county.  
 Anthony, Will R., .....Glen Lyon, .....Luzerne county.  
 Antill, Joseph V., .....2300 N. 5th, .....Philadelphia.  
 Anwyl, James W., .....623 Hazle ave., .....Wilkes-Barre.  
 Appledorn, Ernest F., ....2113 Howard, .....Philadelphia.  
 Appenzeller, Gustav, .....630 S. 11th, .....Philadelphia.  
 Apple, Ammon A., .....2303 N. 2nd, .....Philadelphia.  
 Apple, Franklin M., .....3233 Berks, .....Philadelphia.  
 Armor, Alpheus, .....524 Taylor ave., .....Philadelphia.  
 Armstrong, Alvin B., ....Smethport, .....McKean county.  
 Armstrong, Benj., .....Wilkes-Barre, .....Luzerne county.  
 Armstrong, Clinton O., ..Milford, .....Pike county.  
 Armstrong, Eugene C., ..Cross Fork, .....  
 Armstrong, Geo. B., .....Troy, .....Bradford county.  
 Armstrong James, Jr., ..Greensburg, .....Westmoreland county.  
 Armstrong, James D., ....Brownsville, .....Fayette county.  
 Armstrong, John C., ....Brownsville, .....Fayette county.  
 Armstrong, Lloyd F., ....Grove City, .....Mercer county.  
 Armstrong, Nerl, .....Carmichaels, .....Greene county.  
 Armstrong, Wm. K., .....Bloomsburg, .....Columbia county.  
 Arndt, Harry, Jr., .....1704 N. 25th, .....Philadelphia.  
 Arndt, Jesse E., .....Nanticoke, .....Luzerne.  
 Arnold, Annie B., .....6th & Harris, .....Harrisburg.  
 Arnold, Calvin M., .....6th & Harris, .....Harrisburg.  
 Arnold, Henry P., .....423 N. 42d, .....Philadelphia.  
 Arnold, Jacob A., .....Houtzdale, .....Clearfield county.  
 Arnott, Wm., .....Wilmington, .....Delaware.  
 Aschenbach, Fredk., .....3rd & Callowhill, .....Philadelphia.  
 Ashmead, Alfred C., .....1041 Walnut, .....Philadelphia.  
 Ashmead, Annie S., .....16th & Venango, .....Philadelphia.  
 Ashmead, Benj. P., .....900 Grays Ferry Road, ..Philadelphia.  
 Ashmead, Thos. E., .....1041 Walnut, .....Philadelphia.  
 Ashton, Chas. B., .....431 Arch, .....Norristown.  
 Ashton, Ernest E., .....453 N. Main, .....Wilkes-Barre.  
 Atkins, Geo., H., .....Wilmington, .....Delaware.  
 Atkins, Frank H., .....24 S. 6th, .....Lebanon.

Atkinson, Andrew J., ....Lewistown, .....Mifflin county.  
 Auffurth, Wm. A., .....Rosehill & Indiana ave., Philadelphia.  
 Aughinbaugh, G. W., Jr., 253 N. 2nd, .....Philadelphia.  
 Aughinbaugh, John K., ..2147 S. 15th, .....Philadelphia.  
 Aubley, Samuel, .....Scottsdale, .....Westmoreland county.  
 Auker, Edgar T., .....Mifflintown, .....Juniata county.  
 Aurlin, Fred J., .....Elliott borough, .....Allegheny county.  
 Avery, L. B., .....Alderson, .....  
 Babbitt, C. O., .....Corry, .....Erie county.  
 Babbitt, Franklin T., ....Corry, .....Erie county.  
 Babcock, Wm. C., Jr., ...Blossburg, .....Tioga county.  
 Bachman, Chas. L., .....1101 Lehigh street, .....Easton.  
 Bachman, Edward F., ...767 S. 9th, .....Philadelphia.  
 Bachman, Herbert K., ...448 Wyandotte st., .....So. Bethlehem.  
 Bachman, Carl F., .....51 Liberty street, .....Allegheny.  
 Backenstoe, Harvey F., ..1200 Callowhill, .....Philadelphia.  
 Baer, Hermanus L., .....Somerset, .....Somerset county.  
 Baer, Jacob M., .....1400 Spruce, .....Philadelphia.  
 Baer, Lemuel M., .....1900 Green, .....Philadelphia.  
 Bahl, Chas. Z., .....19th & York, .....Philadelphia.  
 Bailey, Arthur H., .....126 Locust, .....Harrisburg.  
 Bailey, Elmer E., .....3201 Herman, .....Philadelphia.  
 Bailey, Henry T., .....1615 Huntingdon st., ....Philadelphia.  
 Bailey, John Henry, .....18th & Mifflin, .....Philadelphia.  
 Baird, David R., .....Johnstown, .....Cambria county.  
 Baird, John R., .....Brockwayville, .....Jefferson county.  
 Baker, A. M., .....Blairsville, .....Indiana county.  
 Baker, Geo. F., .....3100 N. 16th, .....Philadelphia.  
 Baker, Henry T., .....Warren, .....Warren county.  
 Baker, John G., .....1403 N. Front, .....Philadelphia.  
 Baker, John J., Jr., .....White Haven, .....Luzerne county.  
 Baker, Nellie, .....West Grove, .....Chester county.  
 Baker, Newton C., .....Sunbury, .....Northumberland county.  
 Baker, Sylvester J., .....528 Arch, .....Philadelphia.  
 Baker, Theo. W., .....Norristown, .....Montgomery county.  
 Baker, Thos. D., .....Lewisburg, .....Union county.  
 Balbirnie, H. H. D., .....276 S. 3d, .....Philadelphia.  
 Baldwin, Thos. D., .....834 N. 3d, .....Williamsport.  
 Ball, Clifford A., .....1200 Poplar street, .....Philadelphia.  
 Ball, Wm. E., .....Hellertown, .....Northampton county.  
 Balliet, Howard P., .....1021 Girard ave., .....Philadelphia.  
 Ballinger, A. L., .....Meadville, .....Crawford county.  
 Balmer, John H., .....Elizabethtown, .....Lancaster county.  
 Balph, J. F., .....Butler, .....Butler county.  
 Banks, James, .....Mifflintown, .....Juniata county.  
 Banks, Lucian, .....Mifflintown, .....Juniata county.  
 Banks, Wm. B., .....736 N. 19th, .....Philadelphia.  
 Banks, Wm. H., .....Mifflintown, .....Juniata county.  
 Bamford, Melvin W., ....933 Fairmount ave., ....Philadelphia.  
 Barber, Harry L., .....800 S. 10th, .....Philadelphia.  
 Barber, Peter M., .....Wilkes-Barre, .....Luzerne county.  
 Barker, James H., .....160 Robinson, .....Allegheny.  
 Barkley, Harvey A., .....809 Ligonier, .....Latrobe.

Barlement, Philip L., ....2632 N. 17th, .....Philadelphia.  
 Barlow, Louis E., .....3100 Richmond, .....Philadelphia.  
 Barnard, Chas. H., .....Ashland, .....Schuylkill county.  
 Barndollar, Wm. L., .....2000 Beaver ave., .....Allegheny.  
 Barndt, S. R., .....Alburtis, .....Lehigh county.  
 Barnes, Stephen D., .....Thompson, .....Susquehanna county.  
 Barnett, Eldredge E., ....9th & Race, .....Philadelphia.  
 Barnett, James D., .....246 S. 10th, .....Philadelphia.  
 Barnett, Marlon D., .....Philipsburg, .....Centre county.  
 Barnhardt, Samuel W., ..Oil City, .....Venango county.  
 Barnitz, John S., .....Chambersburg, .....Franklin county.  
 Barr, David Ford, .....13th & Cambria, .....Philadelphia.  
 Barr, Elwyn P., .....Pine Grove, .....Schuylkill county.  
 Barr, J. Rufus, .....West Conshohocken, ....Montgomery county.  
 Barr, Theo. A., .....Pine Grove, .....Schuylkill county.  
 Barr, Wm. D., .....Espen, .....Pittsburgh.  
 Barrett, Chas. L., .....4029 Spring Garden, ....Philadelphia.  
 Barron, Chas. A., .....Shamokin, .....Northumberland county.  
 Barrowman, Thos., .....1535 N. Washington ave., Scranton.  
 Bartges, Aaron L., .....Loganton, .....Clinton county.  
 Barth, Chas., .....2029 Warnock, .....Philadelphia.  
 Barth, Fredk. C., .....424 Fairmount ave., ....Philadelphia.  
 Barth, Joseph H., .....144 38th street, .....Pittsburgh.  
 Bartho, Benj. F., .....Mt. Carmel, .....Northumberland county.  
 Bartholomew, Cornelius,..7th & Gordon, .....Allentown.  
 Bartleson, Chas. L., .....Clifton Heights, .....Delaware county.  
 Bartlett, Henry S., .....1020 Sansom, .....Philadelphia.  
 Barton, Geo. W., .....2314 Chestnut, .....Philadelphia.  
 Barton, Theo. W., .....Waterford, .....Erie county.  
 Barwig, Gustav A., .....2024 N. 2d, .....Philadelphia.  
 Baskin, Mortimer H., ..919 N. 19th, .....Philadelphia.  
 Bassett, F. H., .....Norwood, .....Delaware county.  
 Batdorff, H. James, .....2267 N. 16th, .....Philadelphia.  
 Bateman, Mary H., .....Shousetown, .....Allegheny county.  
 Bateman, Wm. H. S., ....511 York street, .....Philadelphia.  
 Bates, John P., .....Mansfield, .....Tioga county.  
 Bauer, Geo. L., .....747 Holly street, .....Philadelphia.  
 Bauer, Louis G., .....635 N. 5th, .....Philadelphia.  
 Baume, Frank D., .....3121 Cumberland street,..Philadelphia.  
 Baumeister, Joseph F., ..Scranton, .....Lackawanna county.  
 Baumgardner, Chas. B.,..1617 8th avenue, .....Altoona.  
 Baur, Wm., .....St. Clair, .....Schuylkill county.  
 Bayard, Walter W., .....1232 Walnut, .....Philadelphia.  
 Beach, Clifton H., .....Grove City, .....Mercer county.  
 Beach, Geo. B., .....232 S. Main avenue, ....Scranton.  
 Beach, Wm. S., .....326 Ward street, .....Pittsburgh.  
 Beach, Wm. T., .....Minersville, .....Schuylkill county.  
 Beagell, Wm. H., .....Homestead, .....Allegheny county.  
 Beale, Benj., .....602 S. 2d, .....Philadelphia.  
 Beale, Edmond, .....602 S. 2d, .....Philadelphia.  
 Beale, Levi C., .....Unlontown, .....Fayette county.  
 Beale, Mrs. Mollie, .....Unlontown, .....Fayette county.  
 Beam, Frank, .....116 5th avenue, .....McKeesport.

Beamer, Wm. J., .....Manor Station, .....Westmoreland county.  
 Beane, Geo. R., .....1018 Mt. Vernon, .....Philadelphia.  
 Bear, Benj. S. J., .....Mt. Joy, .....Lancaster county.  
 Bear, John H., .....Mt. Joy, .....Lancaster county.  
 Beatty, Arthur Wm., .....2001 Spruce, .....Philadelphia.  
 Beatty, John, .....Frankfort, .....Philadelphia.  
 Beauchamp, Roscoe F., ..2017 S. Broad, .....Philadelphia.  
 Beaver, Samuel, .....Annville, .....Lebanon county.  
 Bebout, John J., .....802 Main, .....Braddock.  
 Bebout, Wm. I., .....Darlington, .....Beaver county.  
 Bechtel, Joseph Y., .....Schwenksville, .....Montgomery county.  
 Bechtold, Thos. B., .....2143 N. 9th, .....Philadelphia.  
 Beck, Addison L., .....Sharon, .....Mercer county.  
 Beck, Adolph, .....52 S. 12th, .....Pittsburgh.  
 Beck, John, .....1001 Wylie avenue, .....Pittsburgh.  
 Beck, Robert W., .....Sharon, .....Mercer county.  
 Beck, Wm. L., .....2508 Wylie avenue, .....Pittsburgh.  
 Beckett, Josiah B., .....Lansdowne, .....Delaware county.  
 Becker, Irwin A., .....Avon, .....  
 Beakley, Geo. A., .....Altoona, .....Blair county.  
 Beers, Benj. F., .....143 Stanton, .....Wilkes-Barre  
 Beh, Edward, .....2567 E. Norris, .....Philadelphia.  
 Beldler, Samuel M., .....2413 Napa, .....Philadelphia.  
 Belghley, Wm. A., .....New Haven, .....  
 Belcher, C. E., .....Linden, .....  
 Bell, Wm., .....1840 Wharton, .....Philadelphia.  
 Bell, Wm. B., Jr., .....1840 Wharton, .....Philadelphia.  
 Bellman, Samuel L., .....48th & Butler, .....Pittsburgh.  
 Bender, Abner S., .....240 Main street, .....Pittsburgh.  
 Bender, Edward A., .....4099 Lancaster avenue, ..Philadelphia.  
 Bender, Geo. H., .....Jonestown, .....Lebanon county.  
 Bender, John J., .....Broad & Ellsworth, .....Philadelphia.  
 Bender, Wm. P., Jr., ....18th & Morris, .....Philadelphia.  
 Benedict, Wm. P., .....289 E. Wheeling, .....Washington.  
 Benedict, Wm. P., .....805 Howard avenue, .....Altoona.  
 Benner, Isaac, .....71st & Woodland avenue., Philadelphia.  
 Bennett, Ashton D., .....Tionesta, .....Forest county.  
 Bennett, Calvin W., .....404 S. Main, .....Wilkes-Barre.  
 Bennett, Francis G., .....Mahaffey, .....Clearfield county.  
 Bennett, Irvin E., .....5023 Woodland avenue, ..Philadelphia.  
 Bensinger, Geo. I., .....Schuylkill Haven, .....Schuylkill county.  
 Bentley, Percival W., ....Williamsport, .....Lycoming county.  
 Berberich, Herman, .....5th & Venango, .....Philadelphia.  
 Bergner, Carl F. G., .....950 Penn street, .....Reading.  
 Beringer, Geo. M., .....528 Arch, .....Philadelphia.  
 Berkstresser, Watson J.,..Kennett Square, .....Chester county.  
 Berlin, Chas. S., .....78 Cottage Row, .....Bradford.  
 Berlin, James O., .....Bath, .....Northampton county.  
 Berry, Chas. L., .....Johnstown, .....Cambria county.  
 Berry, Robert F., .....1133 S. Broad, .....Philadelphia.  
 Berryhill, Henry P., ....Connellsville, .....Fayette county.  
 Beshore, Ellsworth, S., ..Pottstown, .....Montgomery county.  
 Besore, Abraham L., ....Shippensburg, .....Cumberland county.

Best, Austin, .....723 S. 19th, .....Harrisburg.  
 Bethel, Bennett N., .....632 N. 18th, .....Philadelphia.  
 Betts, S. E., .....36th & Wallace, .....Philadelphia.  
 Betz, Wm. Howard, .....1541 Fountaine, .....Philadelphia.  
 Beuter, John, .....619 7th avenue, .....Beaver Falls.  
 Beyer, John J., .....5th & Norris, .....Philadelphia.  
 Beyer, Joseph M., .....Punxsutawney, .....Jefferson county.  
 Beyerle, Chas. W., .....Berneville, .....Berks county.  
 Bichy, Wm., .....6819 Germantown ave., ..Germantown.  
 Bickel, Harry L., .....1412 Walnut, .....Philadelphia.  
 Bickley, Milton H., .....Chester, .....Delaware county.  
 Bickley, Mortimer H., ...Chester, .....Delaware county.  
 Biddle, Chas. J., .....3348 Market, .....Philadelphia.  
 Biery, Wm. F., .....Weissport, .....Carbon county.  
 Biever, John A., .....146 N. 9th, .....Lebanon.  
 Bigony, L. S., .....Lansdale, .....Montgomery county.  
 Bilderback, Joseph B., ...1201 Chestnut, .....Philadelphia.  
 Bille, Geo., .....5th & Jefferson, .....Philadelphia.  
 Billhartz, W. Harry, .....6th & Penn avenue, .....Pittsburgh.  
 Billick, Harvey T., ..... Monongahela, .....Washington county.  
 Billings, F. T., .....Le Raysville, .....Bradford county.  
 Billings, Geo. E., .....Le Raysville, .....Bradford county.  
 Billings, Irving W., .....Nickolson, .....Wyoming county.  
 Billstein, Nicolaus, .....1501 Potter street, .....Chester.  
 Bimber, Geo. L., .....2513 Carson street, .....Pittsburgh.  
 Bing, Edward W., .....1332 W. 2d, .....Chester.  
 Bingham, Frank O., .....Suterville, .....Westmoreland county.  
 Binkley, Geo. K., .....Orwigsburg, .....Schuylkill county.  
 Binns, Harry R., .....77 W. Johnson street, ...Germantown.  
 Birch, Benj. J., .....Greensboro, .....Greene county.  
 Birch, Margaret D., .....Port Carbon, .....Schuylkill county.  
 Birch, Thos. J., .....Port Carbon, .....Schuylkill county.  
 Birchard, Alonzo D., .....Cambridge Springs, .....  
 Birchard, Chas. F., .....Ellwood City, .....Lawrence county.  
 Bird, Wellington H., .....1106 Chestnut, .....Philadelphia.  
 Birmingham, L. Z., .....California, .....Washington county.  
 Bischoff, Louis J., .....187 Federal, .....Allegheny.  
 Bishop, David K., .....18th & Susquehanna ave., Philadelphia.  
 Bitler, Harry, .....134 N. 19th, .....Reading.  
 Bittner, Frederick C., ...419 Larimer avenue, .....Pittsburgh.  
 Bixler, Samuel H. C., ...Greencastle, .....Lawrence county.  
 Blachly, H. S., .....Waynesburg, .....Greene county.  
 Black, Chas. J., .....Chambersburg, .....Franklin county.  
 Black, Jacob H., .....Huntingdon, .....Huntingdon county.  
 Black, James B., .....Christy Park, .....Allegheny county.  
 Black, John, .....Lancaster, .....Lancaster county.  
 Black, Robert M., .....758 Martin, .....Philadelphia.  
 Black, Wm. M., .....Boston, .....Allegheny county.  
 Blackburn, Chas. E., .....1221 5th avenue, .....Pittsburgh.  
 Blackburn, Dewees S., ..228 Mathilda street, .....Pittsburgh.  
 Blackburn, Robert P., ...1172 N. 4th, .....Williamsport.  
 Blackmon, Clarence S., ..Greenville, .....Mercer county.  
 Blackwood, Russell T., ..15th & Thompson, .....Philadelphia.

Blair, Chas. L., .....1200 Callowhill, .....Philadelphia.  
 Blair, Henry C., .....800 Walnut, .....Philadelphia.  
 Blair, Henry C., 3rd, .....800 Walnut, .....Philadelphia.  
 Blair, Marcus A., .....Hop Bottom, .....Susquehanna county.  
 Blair, Mary E., .....West Elizabeth, .....Allegheny county.  
 Blair, Samuel C., .....2801 Diamond, .....Philadelphia.  
 Blair, Wm. H., .....1809 Peach, .....Erie.  
 Blatchley, Harry L., .....Wellsboro, .....Tioga county.  
 Blesse, Wm. J., .....Baden, .....Beaver county.  
 Blew, Joseph O., .....Bridgeton, N. J., .....  
 Bligh, Annie E., .....Grove City, .....Mercer county.  
 Bligh, Leon E., .....Grove City, .....Mercer county.  
 Bligh, Wm. D., .....Grove City, .....Mercer county.  
 Blinkhorn, Geo., .....1232 S. 47th, .....Philadelphia.  
 Blithe, Henry, .....3212 Market, .....Philadelphia.  
 Bloes, W. S., .....Peckville, .....Lackawanna county.  
 Blomer, Geo. D., Jr., .....1505 S. 6th, .....Philadelphia.  
 Blood, Roswell P., .....Brookville, .....Jefferson county.  
 Bloom, Erastus S., .....Ashland, .....Schuylkill county.  
 Blouch, Chas. H., .....521 Cumberland, .....Lebanon.  
 Blough, H. K., .....Elizabethtown, .....Lancaster county.  
 Bobb, Henry, .....East Greenville, .....Montgomery county.  
 Bocking, Gindo C., .....Tyrone, .....Blair county.  
 Bodenhorn, Adam, .....Hamburg, .....Berks county.  
 Boericke, Alexis E., .....1616 Columbia avenue, ..Philadelphia.  
 Boericke, Felix A., .....1204 Dauphin, .....Philadelphia.  
 Boericke, John James, ..1011 Arch, .....Philadelphia.  
 Boger, Chas. E., .....Lebanon, .....Lebanon county.  
 Boher, J. H., .....205 Market, .....Harrisburg.  
 Bohn, Chas. H., .....2nd & Poplar, .....Philadelphia.  
 Bolar, Harry W., .....Homer City, .....Indiana county.  
 Bollinger, Chas. W., .....Apollo, .....  
 Bolton, Alfred H., .....Chelten ave. & Chew st., Germantown.  
 Boltz, Elias K., .....Ann & Edgemont, .....Philadelphia.  
 Bond, Chas. E., .....East Stroudsburg, .....Monroe county.  
 Bond, Harry C., .....Tamaqua, .....Schuylkill county.  
 Bond, Ira L., .....Tamaqua, .....Schuylkill county.  
 Bond, John T., .....Tamaqua, .....Schuylkill county.  
 Bond, Wm. L., Jr., .....627 Smithfield, .....Pittsburgh.  
 Bone, Julius G., .....Dunmore, .....Lackawanna county.  
 Bonnell, A. C., .....2123 Columbia ave., .....Philadelphia.  
 Bonnett, Wm. H., .....Brookville, .....Jefferson county.  
 Bonney, Walter P., .....Erie, .....Erie county.  
 Booher, Edgar F., .....Ruffsedale, .....Westmoreland county.  
 Boone, Geo. H., .....Avoca, .....Luzerne county.  
 Boone, H. M., .....Pottstown, .....Montgomery county.  
 Boorse, Henry A., .....1340 De Kalb, .....Norristown.  
 Boose, William E., .....York, .....York county.  
 Booth, John Henry, .....2303 N. 13th, .....Philadelphia.  
 Booth, Nelson A., .....Bentleyville, .....Washington county.  
 Booth, Thos., .....1901 Butler, .....Philadelphia.  
 Borchert, Wm. H., .....1501 N. 10th, .....Philadelphia.  
 Borden, Wm. M., .....Columbia, .....Lancaster county.



Borell, Henry A., .....2043 Chestnut, .....Philadelphia.  
 Boring, Edwin M., .....10th & Fairmount ave., ..Philadelphia.  
 Borneman, Joseph H., ...Boyertown, .....Bucks county.  
 Bosch, Maximilian, .....1314 Parade, .....Erie.  
 Bossert, Henry, .....281 E. Market, .....Wilkes-Barre.  
 Bostick, Elmer E., .....220 Arch, .....Philadelphia.  
 Bosworth, Chas. H., .....Osceola, .....Tioga county.  
 Bot, Harry F., .....Pittsburgh, .....Allegheny county.  
 Boush, Albert L., .....Meadville, .....Crawford county.  
 Bouton, F. M., .....53 Carey ave., .....Wilkes-Barre.  
 Bovard, Geo. W., .....Tionesta, .....Forest county.  
 Bower, Addison, .....Myerstown, .....Lebanon county.  
 Bower, Andrew, .....Blossburg, .....Tioga county.  
 Bowers, Augustus, .....Prospect, .....  
 Bowers, Chas. A., .....Prospect, .....Butler county.  
 Bowers, Chas. E., .....Union & Mill, .....Middletown.  
 Bowers, Luther P., .....1103 Ridge ave., .....Philadelphia.  
 Bowman, David B., .....West Chester, .....Chester county.  
 Bowman, Mrs. E. R., .....Girard, .....Erie county.  
 Bowman, Geo. M., .....3526 Haverford ave., ...Philadelphia.  
 Bowman, Henry C., .....Gilberton, .....  
 Bowman, John M., Jr., ..4527 Pulaski ave., .....Philadelphia.  
 Bowman, Maurice W., ...100 E. Chelten ave., .....Germantown.  
 Bowman, Wm. Frank, ..1844 Christian, .....Philadelphia.  
 Boyd, Chas. N., .....Butler, .....Butler county.  
 Buyd, Guy H., .....19 S. George street, .....York.  
 Boyer, Allen W., .....4043 Market, .....Philadelphia.  
 Boyer, Edward D., .....Catasauqua, .....Lehigh county.  
 Boyer, Franklin N., .....724 Penn street, .....Reading.  
 Boyer, J. Clinton, .....736 S. 3d, .....Philadelphia.  
 Boyer, Wallace, .....Norristown, .....Montgomery county.  
 Boyle, R. Raum, .....1500 N. 2d, .....Philadelphia.  
 Boyles, Col. J. C., .....Du Bois, .....Clearfield county.  
 Boyles, Robert M., .....Falls Creek, .....  
 Bradford, John M., .....801 W. Cumberland, .....Philadelphia.  
 Brady, Harry F., .....2142 Marston street, .....Philadelphia.  
 Brady, John D., .....1111 Penn ave., .....Pittsburgh.  
 Brady, John T., .....Honesdale, .....Wayne county.  
 Brallier, Geo. W., .....Berlin, .....Somerset county.  
 Brandt, Irvin J., .....531 Penn, .....Reading.  
 Brannan, J. Frank, .....63 Lafayette ave., .....Allegheny.  
 Brant, Chas. W., .....19 S. George, .....York.  
 Brant, Robert P., .....Shanksville, .....Somerset county.  
 Brashear, Fred. L., .....Franklin, .....Venango county.  
 Braun, Edward L., .....286 Western ave., Pbg., .Allegheny county.  
 Bready, Wm. R., Jr., ....1921 N. 7th, .....Philadelphia.  
 Brechbill, McClellan, .....Leechburg, .....Armstrong county.  
 Brehm, F. J. L., .....419 Larimer ave., .....Pittsburgh.  
 Brehm, Louis, .....624 Smithfield street, ....Pittsburgh.  
 Breisch, Wm. H., .....Kingston, .....Luzerne county.  
 Breithaupt, A. P., .....3428 Frankford ave., .....Philadelphia.  
 Brellocks, Fredk. J., .....2643 N. 27th, .....Philadelphia.  
 Bremer, Albert H., .....Germantown, .....Philadelphia.



Brennan, Francis H., ....1320 Allegheny ave., ....Philadelphia.  
 Brenner, John Thos., .....2725 N. Front, .....Philadelphia.  
 Breneman, M. B., .....Saxton, .....Bedford county.  
 Brenneman, Geo. M., .....York, .....York county.  
 Brenneman, Jesse P., ....York, .....York county.  
 Brensinger, Ellen C., ....2532 Columbia ave., .....Philadelphia.  
 Brent, Raymond D., .....6000 Penn ave., .....Pittsburgh.  
 Brewster, Isaac W., .....521 Franklin ave., .....Wilkesburg.  
 Brewster, Wm. N., .....2722 E. Somerset, .....Philadelphia.  
 Brewton, Swain H., .....2602 N. 18th, .....Philadelphia.  
 Bridger, Paul, .....745 Spring Garden, .....Philadelphia.  
 Briesenick, Chas. M., ...Whitney, .....  
 Briggs, Jacob F., .....Shickshinny, .....Luzerne county.  
 Bright, Wm. W., .....Watsonstown, .....Northumberland county.  
 Britcher, Milton W., .....Dillsburg, .....York county.  
 Brittain, John, .....196 Beaver Ave., .....Allegheny.  
 Brobeck, C. P., .....Rochester, .....Beaver county.  
 Brobst, James C., .....Lititz, .....Lancaster county.  
 Brockman, F. W., .....470 E. Market, .....York.  
 Brodhead, Edgar A., ....Kittanning, .....Armstrong county.  
 Brodhead, Wm. F., ....Kittanning, .....Armstrong county.  
 Brodie, Robert C., .....20th & Callowhill, .....Philadelphia.  
 Brooks, Joseph W., ....Scottdale, .....Westmoreland county.  
 Brooks, Lulu, .....1807 Park ave., .....Philadelphia.  
 Brooks, Mitchell B., ....824 S. 4th, .....Philadelphia.  
 Brooks, Raymond R., ....Miles Grove, .....Erie county.  
 Brooks, Walter, .....11th & Pine, .....Philadelphia.  
 Brown, Alonzo D., .....Belle Vernon, .....Fayette county.  
 Brown, Anthony P., .....825 Capose ave., .....Scranton.  
 Brown, Arthur G., .....Gaines, .....  
 Brown, B. Levi, .....935 Arch, .....Philadelphia.  
 Brown, Chas. W., .....Belle Vernon, .....Fayette county.  
 Brown, Clark W., .....1202 11th street, .....Altoona.  
 Brown, Eugene L., .....Beaver, .....Beaver county.  
 Brown, Frank L., .....400 W. Main, .....Norristown.  
 Brown, Frank W., .....2826 N. 11th, .....Philadelphia.  
 Brown, Geo. B. W., .....Titusville, .....Crawford county.  
 Brown, Geo. W., .....21 N. Park Row, .....Erie.  
 Brown, Henry, .....333 Emmett, .....Scranton.  
 Brown, Homer, .....5707 Hays ave., .....Pittsburgh.  
 Brown, James A., .....225 N. Duke street, .....Lancaster.  
 Brown, James L., .....Pleasant Unity, .....Westmoreland county.  
 Brown, James R. L., ....2450 Wylie ave., .....Pittsburgh.  
 Brown, John J., .....402 S. Washington ave., ..Scranton.  
 Brown, John K., .....Port Carbon, .....Schuylkill county.  
 Brown, John S., .....Stroudsburg, .....Monroe county.  
 Brown, Samuel P., .....Greensburg, .....Westmoreland county.  
 Brown, Thos. D., .....3368 Frankford ave., .....Philadelphia.  
 Brownley, Chas. J., .....4202 Lancaster ave., .....Philadelphia.  
 Brubaker, Edwin S., ....New Brighton, .....Beaver county.  
 Bruce, Wm. T., .....835 Willow, .....Lebanon.  
 Bruckmann, Fredk., .....125 Brushton ave., .....Pittsburgh.  
 Brugh, P. S., .....Columbia, .....Lancaster county .

Brugler, Elmer George, ..Bloomsburg, .....Columbia county.  
Bruhms, Julius, .....2656 Bridge, .....Philadelphia.  
Brumbaugh, Albert, .....134 N. 12th, .....Philadelphia.  
Brumhouse, Fredk., Jr.,...11 W. Main, .....Mechanicsburg.  
Bruning, Henry C., .....101 S. Main ave., .....Scranton.  
Bruster, Geo. C., .....Sayre, .....Bradford county.  
Bryson, Lewis, .....Paradise, .....Lancaster county.  
Buchanan, A. Steen, .....Chester, .....Delaware county.  
Bucher, Wm. Lewis, .....Columbia, .....Lancaster county.  
Buchheit, Chas. R., .....McDonald, .....Washington county.  
Buchholz, Wm. M. G., ...Leechburg, .....  
Buck, John A., .....North Warren, .....Warren county.  
Buck, Will G., .....Shamokin, .....Northumberland county.  
Buckingham, Harry S., ..7205 Germantown ave., ..Philadelphia.  
Buckingham, Hugh W., ..Burnside, .....Clearfield county.  
Buckman, James, .....8th & Green, .....Philadelphia.  
Buckman, Thos. L., .....Chestnut Hill, .....Philadelphia.  
Buckman, Wm. W., .....1111 Spruce, .....Philadelphia.  
Buckwalter, Irwin M., ..Phoenixville, .....Chester county.  
Buehler, David A., .....1711 Summer, .....Philadelphia.  
Buerler, L. M., .....Gettysburg, .....Adams county.  
Bulger, Howard H., .....Brownsville, .....Fayette county.  
Bullock, Chas., .....528 Arch, .....Philadelphia.  
Bullock, John G., .....528 Arch, .....Philadelphia.  
Bullock, Thos. H., .....8th & Spruce, .....Philadelphia.  
Bullock, Wm. A., .....528 Arch, .....Philadelphia.  
Bundel, Chas. E., .....317 State, .....Sharon.  
Bundel, Grace, .....317 State, .....Sharon.  
Bundy, Clinton T., .....77 Washington ave., .....Pittsburgh.  
Bunker, Wm. B., .....15th & Arch, .....Philadelphia.  
Bunting, Frank A., .....De Kalb & Airy, .....Norristown.  
Burchfield, Wm. C., .....1704 W. Dauphin, .....Philadelphia.  
Burdick, A. W., .....Carbondale, .....  
Burford, Ethan A., .....106 Burton ave., .....Pittsburgh.  
Burg, John D., .....4th & Brown, .....Philadelphia.  
Burgoon, Wm. H., .....1322 10th ave., .....Altoona.  
Burk, Alfred G., .....1106 Chestnut, .....Philadelphia.  
Burk, Wm. B., .....6th & Arch, .....Philadelphia.  
Burke, Sylvester S., .....New Castle, .....Lawrence county.  
Burke, Wm. T., .....1201 N. 11th, .....Philadelphia.  
Burkett, Geo. G., .....East Hickory, .....Forest county.  
Burnham, Dewitt C., .....Mansfield, .....Tioga county.  
Burns, Andrew B., .....Montrose, .....Susquehanna county.  
Burns, Geo. C., .....Montrose, .....Susquehanna county.  
Burns, Howard W., .....Coraopolis, .....Allegheny county.  
Burns, John K., .....Minersville, .....Schuylkill county.  
Burns, Wm. A., .....1130 Spring Garden, .....Philadelphia.  
Burns, Willoughby P., ...Nanticoke, .....Luzerne county.  
Burt, Andrew, .....Tamaqua, .....Schuylkill county.  
Burton, Robert J., .....1306 Girard ave., .....Philadelphia.  
Bush, Harvey B., .....409 N. Main, .....Bethlehem.  
Bush, Horace, .....E. Stroudsburg, .....Monroe county.  
Bushong, Park W., .....New Castle, .....Lawrence.

Buskirk, James V., .....2303 N. 2d, .....Philadelphia.  
 Buss, Milton M., .....So. Bethlehem, .....Northampton county.  
 Bussler, Royal H., .....Newberry, .....Lycoming county.  
 Bute, W. F., .....Vanderbilt, .....Fayette county.  
 Butler, John P., .....8th ave. & 12th st., .....Altoona.  
 Butt, A. W., .....Paoli, .....Chester county.  
 Butz, A. S., .....4202 Lancaster ave., .....Philadelphia.  
 Butz, Newton, .....8th & Race, .....Philadelphia.  
 Buzard, Albert M., .....Kylertown, .....Montgomery county.  
 Bye, John J., .....Braddock, .....Allegheny county.  
 Byerly, Chas. H., .....7227 Saybrook ave., .....Philadelphia.  
 Byers, Hinzinga C., .....Pottstown, .....Montgomery county.  
 Byers, Robert E., .....Monongahela, .....Washington county.  
 Byers, Wm. C., .....335 5th ave., .....Pittsburgh.  
 Cable, Albert, .....Pottsville, .....Schuylkill county.  
 Cadmus, Robert C., .....2100 Mt. Vernon, .....Philadelphia.  
 Cain, Albert W., .....Elizabethtown, .....Lancaster county.  
 Caldwell, Joseph F., .....Neshannock Falls, .....Lawrence county.  
 Caldwell, Robert A., .....Tarentum, .....Allegheny county.  
 Calhoun, Albert R., .....4516 Lancaster ave., .....Philadelphia.  
 Calhoun; Bruce L., .....Verona, .....Allegheny county.  
 Calhoun, James J., .....McKeesport, .....Allegheny county.  
 Calhoun, John T., .....412 E. Main, .....Braddock.  
 Calhoun, Will. M., .....Verona, .....Allegheny county.  
 Callaghan, Daniel O., ....2165 E. York, .....Philadelphia.  
 Callaghan, E. M., .....152 S. Highland ave., ....Pittsburgh.  
 Callender, Wm. B., .....Bradford, .....McKean county.  
 Cameron, Chas. S., .....601 S. 15th, .....Philadelphia.  
 Cameron, Norris, .....Pitcairn, .....Allegheny county.  
 Camp, Benj. E., .....Elizabeth, .....Allegheny county.  
 Camp, Fredk. P., .....Port Allegheny, .....McKean county.  
 Campbell, Andrew, .....677 Franklin, .....Williamsport.  
 Campbell, Chas. C., .....175 Lacock, .....Allegheny.  
 Campbell, Clarence H., ..1936 Arch, .....Philadelphia.  
 Campbell, Harry M., ....146 McKean, .....Philadelphia.  
 Campbell, Hugh, .....Osceola Mills, .....Clearfield county.  
 Campbell, James T. B., ..New Castle, .....Lawrence county.  
 Campbell, John C., .....Clarion, .....Clarion county.  
 Campbell, J. L., .....Grove City, .....Mercer county.  
 Campbell, L. B., .....Luzerne, .....Luzerne county.  
 Campbell, Wm. H., .....1118 S. 12th, .....Philadelphia.  
 Campbell, Wm. H., .....7th & Snyder ave., .....Philadelphia.  
 Canfield, Marshall B., ....Warren, .....Warren county.  
 Cannon, Benj. J., .....Moscow, .....Lackawanna county.  
 Canover, Samuel H., .....18th & Jefferson, .....Philadelphia.  
 Canton, H. C., .....210 E. 18th, .....Erie.  
 Cantrell, Wm. A., .....1809 S. 8th, .....Philadelphia.  
 Cappell, Theo., .....3704 Forbes ave., .....Pittsburgh.  
 Carey, Harris M., .....342 S. 6th, .....Philadelphia.  
 Carey, Harry C., .....800 Walnut, .....Philadelphia.  
 Carey, Thos. H., .....Benton, .....Columbia county.  
 Carl, Chas. B., .....Greencastle, .....Franklin county.  
 Carman, Geo. L., .....2201 Hunting Park ave., ..Philadelphia.

Carothers, Horace H., ....Charleroi, .....Washington county.  
 Carpenter, H. C., .....Troy, .....Bradford county.  
 Carpenter, Wm. A., .....839 N. 20th, .....Philadelphia.  
 Carr, John D., .....Red Bank Furnace, .....  
 Carroll, S. L., .....114 S. 12th, .....Philadelphia.  
 Carson, Jason W., .....Indiana, .....Indiana county.  
 Carstens, Louis P., .....1000 Spring Garden, .....Philadelphia.  
 Carter, Archie U., .....824 State, .....Erie.  
 Carter, Herbert G., .....3600 Kensington ave., ....Philadelphia.  
 Carter, John P., .....Allentown, .....Lehigh county.  
 Cartwright, Chas. F., ....12th & Jefferson, .....Philadelphia.  
 Case, John W., .....Hartstown, .....Crawford county.  
 Cassel James W., .....3945 Fairmount ave., .....Philadelphia.  
 Cassell, Wm. E., .....1645 N. 6th, .....Harrisburg.  
 Castle, Abram L., .....3d & Kerlin, .....Chester.  
 Castrique, Chas., .....Allquippa, .....Beaver county.  
 Catherman, Isaac N., ....Selinsgrove, .....Snyder county.  
 Chace, Herman L., .....Hallstead, .....Susquehanna county.  
 Chalfant, Wm. W., .....15th & Tasker, .....Philadelphia.  
 Chalquest, G. E., .....Coral & York, .....Philadelphia.  
 Chamberlain, John M., ..12th & Edgemont ave., ..Chester.  
 Chambers, B. H., .....Avondale, .....Chester county.  
 Chambers, Geo. R., .....Emlenton, .....Venango county.  
 Chambers, Oscar T., ....Honesdale, .....Wayne county.  
 Chambers, Thos. S., ....Unionville, .....Chester county.  
 Chambers, Wm. B., .....10th & Carson, .....Pittsburgh.  
 Chandler, Chas. F., .....1800 N. 11th, .....Philadelphia.  
 Chandler, I. Eugene, ....Kennett Square, .....Chester county.  
 Chandler, Wm. D., .....Strasburg, .....Lancaster county.  
 Chapman, Alva L., .....Canal & Lock, .....Tarentum.  
 Chapman, B. Grant, ....125 Haines street, .....Germantown.  
 Chatham, John E., .....2801 W. 3d, .....Chester.  
 Cheek, Simmons L., .....2107 N. 12th, .....Philadelphia.  
 Cherdron, Chas., .....170 East street, .....Allegheny.  
 Cherry, Will. W., .....205 Matilda, .....Pittsburgh.  
 Cheswright, James W., ..412 Market, .....Pittsburgh.  
 Childs, Walter F., .....1040 De Kalb, .....Norristown.  
 Childs, Wm. R., .....North Wales, .....Montgomery county.  
 Crissman, O. E., .....Kipple, .....Blair county.  
 Chittenden, Chas. E., ....519 Lackawanna ave., ....Scranton.  
 Christ, Chas. W., .....Milton, .....Northumberland county.  
 Christ, Geo. R., .....191 Fulton, .....Brooklyn, N. Y.  
 Christman, Albert S., ....Bethlehem, .....Northampton county.  
 Christman, Chas. D., ....Wiconisco, .....Dauphin county.  
 Christman, Harry W., ....2011 N. 20th, .....Philadelphia.  
 Christy, Robert, .....315 Smithfield street, ....Pittsburgh.  
 Church, Wm. F., .....Kingston, .....Luzerne county.  
 Civins, Albert I., .....414 Cedar, .....Scranton.  
 Clabaugh, E. M., .....401 6th ave., .....Altoona.  
 Clair, Joseph S., .....2140 Callowhill, .....Philadelphia.  
 Claphan, Hesser C., .....Cumberland & Emerald, ..Philadelphia.  
 Clapp, Samuel C., Jr., ..Milton, .....Northumberland county.  
 Clark, Chas. H., .....36th & Race, .....Philadelphia.

Clark, David C., .....2400 Cumberland, .....Philadelphia.  
 Clark, Edward B., .....542 N. 13th, .....Reading.  
 Clark, Harry S., .....Uniontown, .....Fayette county.  
 Clark, Harry G., .....Brookville, .....Jefferson county.  
 Clark, Hubert F., .....Carbondale, .....Lackawanna county.  
 Clark, John E., .....1400 Spruce, .....Philadelphia.  
 Clark, Joseph N., .....1111 N. 3d, .....Harrisburg.  
 Clark, Richard, .....Morrisville, .....Bucks county.  
 Clark, Wm. G., .....20th & Diamond, .....Philadelphia.  
 Clarke, Arthur A., .....506 Market, .....Pittsburgh.  
 Clarke, E. Edwin, .....Braddock, .....McKean county.  
 Clarkson, Thos. R., .....Shamokin, .....Northumberland county.  
 Claudy, John C., .....Newville, .....Cumberland county.  
 Claudy, R. Bleau, .....Newville, .....Cumberland county.  
 Clayton, Abraham T., ...Ogontz, .....  
 Clemens, James L., .....24 S. Centre, .....Pottsville.  
 Clemens, John W., .....Minersville, .....Schuylkill county.  
 Clemmer, Jonas G., .....905 Indiana ave., .....Philadelphia.  
 Clemson, Chas. E., .....54 N. 5th, .....Reading.  
 Clemson, Francis C., .....104 Schuylkill ave., .....Reading.  
 Cleveland, Fred. L., ....530 W. 9th, .....Erie.  
 Clewell, Lawrence I., ...423 Wyandotte, .....Philadelphia.  
 Clewell, Wm. H., .....Summit Hill, .....So. Bethlehem.  
 Cliffe, Albert, .....Meadville, .....Crawford county.  
 Cliffe, Wm. L., .....Kens'n av. & Somerset st. Philadelphia.  
 Cline, Hugh M., .....1317 Parrish, .....Philadelphia.  
 Clinefelter, Plumer W., ..Oil City, .....Venango county.  
 Cloud, Harlan, .....Darby, .....Delaware county.  
 Cloud, Norman H., .....100 W. Susquehanna ave., Philadelphia.  
 Clugston, John W., .....Waynesboro, .....Franklin county.  
 Clutton, Frank, .....Slippery Rock, .....Butler county.  
 Clutton, Geo. W., .....New Castle, .....Lawrence county.  
 Coble, Aaron C., .....Dauphin, .....Dauphin county.  
 Cochran, John C., .....Big Run, .....Jefferson county.  
 Cochran, Thos. A., .....Apollo, .....Armstrong county.  
 Codville, Harry L., .....184 W. Girard ave., .....Philadelphia.  
 Codville, Wm. L., .....184 W. Girard ave., .....Philadelphia.  
 Codori, Simon J., Jr., ....Gettysburg, .....Adams county.  
 Coffey, Maurice G., .....630 E. Water, .....Lock Haven.  
 Coffin, Roscoe L., .....43 N. 9th, .....Reading.  
 Coffrey, John B., .....Centralia, .....  
 Coggins, Franklin, .....2116 N. 8th, .....Philadelphia.  
 Cohen, Isaac, .....12th & Market, .....Philadelphia.  
 Cohen, John Thos., .....222 Townsend, .....Chester.  
 Cohen, Leiser P., .....211 S. 13th, .....Philadelphia.  
 Colbert, Harry, .....32 S. Seneca, .....Oil City.  
 Colborn, I. Grant, .....Mountain Top, .....Luzerne county.  
 Colborn, Wm. T., .....Ashley, .....Luzerne county.  
 Cole, Horatio M., .....1438 Capouse ave., .....Scranton.  
 Coleman, A. A., .....Canonsburg, .....Washington county.  
 Coleman, James H., .....Canonsburg, .....Washington county.  
 Coleman, John E., .....4128 Market, .....Philadelphia.  
 Coleman, Milton C., .....Reynoldsville, .....Jefferson county.

Coles, M. S., .....Stony Fork, .....Tioga county.  
 Coller, Wm. W., .....334 Penn, .....Reading.  
 Collins, John H., .....608 S. 42d, .....Philadelphia.  
 Collman, A. E. R., .....257 Scott, .....Wilkes-Barre.  
 Collom, Albert L., .....11 Centre, .....Oil City.  
 Collom, Samuel S., .....Saegertown, .....Crawford county.  
 Coltman, Thos. C., .....Jenkintown, .....  
 Colwes, Henry F., .....260 Oaklane ave., .....Pittsburgh.  
 Comber, Daniel J., .....2010 Sansom, .....Philadelphia.  
 Comfort, Newton C., .....2601 Columbia ave., .....Philadelphia.  
 Commings, Chas. S., .....Schuylkill Haven, .....Schuylkill county.  
 Comp, Harry G., .....30th & Diamond, .....Philadelphia.  
 Compton, B. Frank, .....Upland, .....Delaware county.  
 Conard, Geo. M., .....4th & Berks, .....Philadelphia.  
 Conard, Norman S., .....13th & Jefferson, .....Philadelphia.  
 Conard, Thos. E., .....7th & Brown, .....Philadelphia.  
 Condict, Wm., .....Brockwayville, .....Jefferson county.  
 Conerton, Francis A., .....700 S. 17th, .....Philadelphia.  
 Conley, Joseph X., .....6830 Kelley, .....Pittsburgh.  
 Connell, Frank J., .....1233 Myrtle, .....Philadelphia.  
 Connely, S. S., .....Pittsfield, .....Warren county.  
 Conner, Geo. P., .....830 Chestnut, .....Philadelphia.  
 Conner, John B., .....Burnside, .....Clearfield county.  
 Conner, Joseph S., .....Beaver, .....Beaver county.  
 Conner, Olando, .....Lincolnvillle, .....Crawford county.  
 Conner, Wm., .....4562 Wayne ave., .....Germantown.  
 Conrad, Geo. E., .....Johnstown, .....Cambria county.  
 Converse, Howard R., .....1445 S. 2d, .....Philadelphia.  
 Cook, Ernest F., .....5901 Main, .....Germantown.  
 Cook, Francis W., .....Spring City, .....Chester county.  
 Cook, James G., .....New Alexander, .....Westmoreland county.  
 Cook, John B., .....16th & Lombard, .....Philadelphia.  
 Cook, Stephen G., .....Coatesville, .....Chester county.  
 Cook, W. S. G., .....Coatesville, .....Chester county.  
 Cooke, Milton R., .....Jeannette, .....  
 Cooke, Wilson M., .....1374 2d ave., .....Pittsburgh.  
 Cool, Romulus B., .....Ingram, .....Allegheny county.  
 Cool, Wm. Frederick, .....169 Allen, .....Buffalo, N. Y.  
 Cooley, Harry C., .....27th & York, .....Philadelphia.  
 Coon, Fred. H., .....Waterford, .....Erie county.  
 Coon, Oliver P., .....Ceres, .....McKean county.  
 Cooper, Frank A., .....Scottsdale, .....Westmoreland county.  
 Cooper, Herbert, .....15th & Market, .....Philadelphia.  
 Cooper, Morris, .....1812 S. 4th, .....Philadelphia.  
 Cope, Edward K., .....424 W. Dauphin, .....Philadelphia.  
 Cope, Frank H., .....424 W. Dauphin, .....Philadelphia.  
 Cope, Thos., .....Nazareth, .....Northampton county.  
 Copeland, Harry T., .....134 N. Main, .....Greensburg.  
 Copeland, James B., .....Philadelphia, .....Philadelphia county.  
 Copeland, Wm. W., .....193 Main, .....Athens.  
 Copenhaver, John A., ...Tyrone, .....Blair county.  
 Coppenhaver, Chas. B., ..142 Montague, .....Brooklyn, N. Y.  
 Corbett, Albert G., .....Clarion, .....Clarion county.

Corbett, W. W., .....New Bethlehem, .....Clarion county.  
 Corbyn, T. N., .....1033 Pearl, .....Philadelphia.  
 Corey, Wilbert E., .....Dravosburg, .....Allegheny county.  
 Cornell, Edward A., .....Williamsport, .....Lycoming county.  
 Cornell, Horace H., .....2112 N. 17th, .....Philadelphia.  
 Cornell, Wharton L., .....2200 N. 15th, .....Philadelphia.  
 Cornfield, Abraham, .....4th & Catharine, .....Philadelphia.  
 Cornman, John A., .....Beaver Falls, .....Beaver county.  
 Correll, Joseph B., .....628 Morton ave., .....Chester.  
 Correy, John M., .....Milton, .....Northumberland county.  
 Corrie, Wm. M. G., .....1231 Snyder ave., .....Philadelphia.  
 Corson, Inwood S., .....117 Market, .....Philadelphia.  
 Corson, Thos. C., .....2523 E. Norris, .....Philadelphia.  
 Corwin, J. H., .....Montrose, .....Susquehanna county.  
 Costen, Wm. A., .....53 E. Main, .....Norristown.  
 Cottam, Chas. M., .....1311 5th ave., .....Beaver Falls.  
 Cotterel, John W., .....1700 Ridge ave., .....Harrisburg.  
 Cottrell, Clarence V., .....Braddock, .....McKean county.  
 Cotzhausen, Louis V., .....24th & Parrish, .....Philadelphia.  
 Coughenour, D. R., .....Alverton, .....  
 Coughenour, Harry S., ..Dravosburg, .....  
 Coulston, John B., .....Austin, .....Potter county.  
 Coulter, N. S., .....Sligo, .....Clarion county.  
 Coulter, P. L., .....McDonald, .....Washington county.  
 Covell, Silas W., .....612 Rebecca ave., .....Wilkinsburg.  
 Covert, A. W., .....4401 Butler, .....Pittsburgh.  
 Covert, J. Wells, .....Evans City, .....Butler.  
 Cowen, Wm. S., .....105 S. Centre, .....Pottsville.  
 Cowles, Horace H., .....Lander, .....Warren county.  
 Cowles, James P., .....Orwell, .....Bradford county.  
 Cox, Andrew P., .....Big Run, .....Jefferson county.  
 Cox, Geo. W., .....4234 Germantown ave., ..Philadelphia.  
 Cox, Harry, .....6001 Vine, .....Philadelphia.  
 Cox, Harry L., .....Ephrata, .....Lancaster county.  
 Cox, Linwood, .....East Greenville, .....Montgomery county.  
 Coxe, Hugh N., .....Schuylkill Haven, .....Schuylkill county.  
 Coxe, Russel L., .....46 Baltimore ave., .....Philadelphia.  
 Cozens, Nathan A., .....7th & Montgomery ave.,..Philadelphia.  
 Craig, Ben. C., .....Brookville, .....Jefferson county.  
 Craig, Clark R., .....341 S. 12th, .....Philadelphia.  
 Craig, James, .....Fort Washington, .....  
 Craig, James, .....Slatington, .....  
 Craig, James H., .....2033 Perryville ave., .....Allegheny.  
 Craig, James S., .....St. Petersburg, .....Clarion county.  
 Craig, John F., .....Clintonville, .....Venango county.  
 Craig, Samuel A., .....West Alexander, .....Washington county.  
 Craig, Samuel B., .....Noblestown, .....  
 Craighead, Geo. S., .....3018 Susquehanna ave., ..Philadelphia.  
 Craighead, Thos., .....2602 Richmond, .....Philadelphia.  
 Craine, W. M. C., .....400 Chestnut ave., .....Altoona.  
 Crass, John H., .....3012 Linden Sq., .....Philadelphia.  
 Crawford, Horace V., .....1500 N. 29th, .....Philadelphia.  
 Crawford, Joseph, .....Frankf'd av. & Hart Lane, Philadelphia.



Crawford, Luther L., .... Uniontown, ..... Fayette county.  
 Crawford, M. P., ..... Mifflintown, ..... Juniata county.  
 Crawford, Samuel D., .... Lock Haven, ..... Clinton county.  
 Crawford, Walter, ..... Nazareth, ..... Northampton county.  
 Crawford, Wm. H., ..... Nazareth, ..... Northampton county.  
 Creasy, L. S., ..... Rock Glen, ..... Luzerne county.  
 Creighton, Benj. F., ..... Philadelphia, ..... Philadelphia county.  
 Creighton, Orville S., .... 410 Race, ..... Philadelphia.  
 Creswell, Robert, ..... Hawthorn, ..... Clarion county.  
 Cribbs, John D., ..... 5144 Cypress, ..... Pittsburgh.  
 Cribbs, Will. M., ..... 5144 Cypress, ..... Pittsburgh.  
 Crispens, John, ..... 87 Logan, ..... Pittsburgh.  
 Crooks, Wm. C., ..... 525 S. 13th, ..... Philadelphia.  
 Crothers, James L., .... 2001 Fairmount, ..... Philadelphia.  
 Crotzer, Robert K., .... Franklin & Lacka. ave., Scranton.  
 Crouch, Wallace H., .... Ellwood City, ..... Lawrence county.  
 Crowthers, Thos. A., .... Coal Centre, ..... Washington county.  
 Crumble, Geo. J., ..... Broad & Allegheny ave., Philadelphia.  
 Crubbison, Wm. W., .... New Castle, ..... Lawrence county.  
 Culbert, John S., ..... 312 Ann, ..... Homestead.  
 Culbert, Joseph W., .... Collegeville, ..... Montgomery county.  
 Culbert, R. W., ..... 4000 Chestnut, ..... Philadelphia.  
 Culby, Walter G., ..... 2405 Lombard, ..... Philadelphia.  
 Culin, Mrs. Melissa, .... 4128 Market, ..... Philadelphia.  
 Cummings, T. F., ..... Tarentum, ..... Allegheny county.  
 Cunningham, J. S. M., ... Clarksville, ..... Tennessee.  
 Cunningham, Wm. J., .... 1410 7th ave., ..... Beaver Falls.  
 Curry, John L., ..... 2140 Callowhill, ..... Philadelphia.  
 Curry, Wm. H., ..... Gastonville, ..... Washington county.  
 Curtis, Frank A., ..... Cochranon, ..... Crawford county.  
 Curtis, Henry, ..... 1558 N. 11th, ..... Philadelphia.  
 Curtis, L. C., ..... Utica, ..... Venango county.  
 Dack, James, ..... Pleasantville, ..... Venango county.  
 Dahls, Geo. E., ..... 49th & Woodland ave., .. Philadelphia.  
 Dale, David, ..... 3401 Wharton, ..... Philadelphia.  
 Dale, James A., ..... 19 S. George street, ..... York.  
 Dale, W. H., ..... Houtzdale, ..... Clearfield county.  
 Dalpe, Fredk. A., ..... 2235 Columbia ave., .... Philadelphia.  
 Dalton, D. Alfred, ..... Upland, ..... Delaware county.  
 Dalton, David, ..... Sharon Hill, ..... Mercer county.  
 Dalton, John F., ..... Latrobe, ..... Westmoreland county.  
 Dalton, Joseph E., ..... Glenolden, .....  
 Daly, James J., ..... 2314 S. 12th, ..... Philadelphia.  
 Dambrun, Gustave, .... 65 Shiloh, ..... Pittsburgh.  
 Dancy, Henry H., ..... Phoenixville, ..... Chester county.  
 Daniels, E. A., ..... Sistersville, ..... West Virginia.  
 Dannenhauer, Frederick, .. 1301 Germantown ave., .. Philadelphia.  
 Danowsky, E. J., ..... Allentown, ..... Lehigh county.  
 Danzberger, Geo. W., ... 640 Broad, ..... Chambersburg.  
 Dare, Chas. W., ..... Troy, ..... Bradford county.  
 Dare, Geo. S., ..... 246 N. 52d, ..... Philadelphia.  
 Darling, Lewis H., ..... Chandlers Valley, .....  
 Darlington, Horace H., .. Concordville, ..... Delaware county.



Daugherty, John M., ....Indiana, .....Indiana county.  
 Daugherty, S. Clark, .....Jeannette, .....  
 Davenport, E. F., .....Albion, .....Erie county.  
 Davies, Wm. R., .....Edwardsdale, .....Luzerne county.  
 Davis, Alfred, .....Taylor, .....Lackawanna county.  
 Davis, B. Frank, .....19th & Fairmount ave., ..Philadelphia.  
 Davis, B. K., .....246 N. 11th, .....Philadelphia.  
 Davis, Chas. W., .....77 Ohio street, .....Allegheny.  
 Davis, Daniel Webster, ..Conemaugh, .....Cambria county.  
 Davis, Fredk. H., .....2902 Richmond, .....Philadelphia.  
 Davis, Geo. W., .....Centralia, .....Columbia county.  
 Davis, Geo. W., .....103 N. Market sq., .....Scranton.  
 Davis, Harry I., .....Hollidaysburg, .....Blair county.  
 Davis, Harry M., .....Lansdowne, .....  
 Davis, Henry B., .....St. Clair, .....Schuylkill county.  
 Davis, Ira W., .....Ebensburg, .....Cambria county.  
 Davis, John Samuel, .....124 Manhattan, .....Allegheny.  
 Davis, Jonathan W., .....Plymouth, .....Luzerne county.  
 Davis, Joseph, .....Taylor, .....Lackawanna county.  
 Davis, Marshall A., .....4750 Franklin ave., .....Philadelphia.  
 Davis, Robert G., .....237 N. 10th, .....Philadelphia.  
 Davis, Sallie S., .....St. Clair, .....Schuylkill county.  
 Davis, Samuel B., .....17th & Jackson, .....Philadelphia.  
 Davis, Sumner D., .....Jermyn, .....Lackawanna county.  
 Davis, Thos. B., .....Williamstown, .....Dauphin county.  
 Davis, Thos. E., .....Summit Hill, .....Carbon county.  
 Davis, Wm. D., .....Main & Parker, .....Scranton.  
 Davis, Wm. H., .....Prince & James, .....Lancaster.  
 Davis, Wm. W., .....122 E. Ohio, .....Allegheny.  
 Davison, Geo. S., .....9th & Callowhill, .....Philadelphia.  
 Davy, Geo. W., .....Coatesville, .....Chester county.  
 Dawes, Wm. R., .....16 Throop, .....Scranton.  
 Dawson, Frank, .....1840 S. 10th, .....Philadelphia.  
 Day, Dudley B., .....Ridgway, .....Elk county.  
 Day, Fredk. S., .....811 N. 17th, .....Philadelphia.  
 Day, Samuel A., .....12th & Mt. Vernon, .....Philadelphia.  
 Dean, John M., .....Parkesburg, .....Chester county.  
 Dean, Norman R., .....6102 Main street, .....Germantown.  
 Deardorff, Calvin A., .....1205 7th street, .....Washington, D. C.  
 De Beust, Robert H., .....1801 South street, .....Philadelphia.  
 Deckard, John W., .....Richfield, .....Juniata county.  
 Decker, Henry T., .....Knoxville borough, .....Allegheny county.  
 Decker, Wm. Robert, ....2239 Fairmount ave., .....Philadelphia.  
 Deegan, S. S., .....Downingtown, .....Chester county.  
 Deen, Frank S., .....5 Locust, .....Lancaster.  
 Deen, Wm. L., .....Chestnut street, .....Lancaster.  
 Deens, John L., .....Beaver, .....Beaver county.  
 De Ford, Wm. H., .....Frankfort Springs, .....Beaver county.  
 De France, H. F., .....Johnstown, .....Cambria county.  
 De Frehn, Chas. W., .....403 W. Arch, .....Pottsville.  
 De Graffe, Bertha L., ....1914 Cherry, .....Philadelphia.  
 Delbert, Wm. Henry, ....7th & Oxford, .....Philadelphia.  
 Delss, Wm., .....401 Walnut, .....Harrisburg.

Delfin, Frank K., .....2220 5th ave., .....Pittsburgh.  
 Delker, Wm., .....1020 S. 2d, .....Philadelphia.  
 Delong, Wm. E., .....2110 N. 16th, .....Philadelphia.  
 Dengler, Geo. C., .....334 Penn, .....Reading.  
 Dennis, Frank E., .....Carbondale, .....Lackawanna county.  
 Dennison, Burt E., .....Bruin, .....Butler county.  
 Denniston, Wm. M., ....109 Allegheny street, ....Hollidaysburg.  
 Denny, John F., .....Sharon, .....Mercer county.  
 Denslow, Wm. C., .....686 Preble ave., .....Allegheny county.  
 Dentler, Roy W., .....1312 Race, .....Philadelphia.  
 Deshong, James B., .....202 Herr, .....Harrisburg.  
 De Toland, Arthur, .....930 Arch, .....Philadelphia.  
 Detwiler, Wm. P., .....Phoenixville, .....Chester county.  
 Devine, Geo. C., .....1501 S. 19th, .....Philadelphia.  
 Dewees, Wm. H., .....2501 N. 18th, .....Philadelphia.  
 Dewey, Herbert W., .....160 Main, .....Bradford.  
 Dewitt, A. M., .....Orangeville, .....Col. county.  
 Dice, Wm., .....2000 Beaver ave., .....Allegheny.  
 Dicks, James W., .....New Oxford, .....Adams county.  
 Dickel, Wm. J., .....1302 Hanover, .....Philadelphia.  
 Dickeson, Wm. E., .....Media, .....Delaware county.  
 Dickinson, Chas. S., .....113 Federal, .....Allegheny.  
 Dickinson, Robert C., ....1120 State, .....Erie.  
 Dickson, W. S., .....McConnellsburg, .....Fulton county.  
 Diebert, Thos. I., .....Pottsville, .....Schuylkill county.  
 Diefenbach, Wm., .....Erie, .....Erie county.  
 Diefenbech, Henry, .....10th & Jackson, .....Philadelphia.  
 Diehl, Geo. E., .....Armat & Willow ave., ...Philadelphia.  
 Diehl, Justin M., .....9th & Susquehanna ave., Philadelphia.  
 Dierolf, Chas. B., .....Kens'gton & Somerset, ..Philadelphia.  
 Dietrich, Henry D., .....203 S. 4th, .....Reading.  
 Dietrich, James, .....Portland, .....Northampton county.  
 Dietrich, Pierce A., .....5901 Haverford ave., ....Philadelphia.  
 Dietz, Harry E., .....Lock Haven, .....Clinton county.  
 Dilks, Harmon, Jr., .....2200 N. Broad, .....Philadelphia.  
 Dilks, M. L., .....541 Pine, .....Philadelphia.  
 Dille, John N., .....Prosperity, .....Washington county.  
 Dinger, Jeremiah N., .....Boalsburg, .....Centre county.  
 Dippery, Geo. C., .....Lewistown, .....Mifflin county.  
 Dirmitt, Chas. H., .....1201 S. 19th, .....Philadelphia.  
 Disbrow, Burt F., .....Elgin, .....  
 Disque, Henry, .....124 S. Negley ave., .....Pittsburgh.  
 Diveley, M. L., .....1 Royal street, .....Allegheny.  
 Dix, Levan A., .....799 S. 2d, .....Philadelphia.  
 Dixon, Edgar K., .....1501 Buena Vista street,..Allegheny.  
 Dixon, Fredk. H., .....115 Penn ave., .....Warren.  
 Dixon, John G., .....2401 E. Huntingdon, ....Philadelphia.  
 Doake, Robert S., .....601 S. 15th, .....Philadelphia.  
 Dobson, Leonard C., .....2224 N. 30th, .....Philadelphia.  
 Dodds, Joseph M., .....240 Lacock, .....Allegheny.  
 Dodge, Buel, .....Honesdale, .....Wayne county.  
 Dodson, Chas. G., .....127 S. 4th, .....Philadelphia.  
 Dodson, Robert C., .....Emporium, .....Cameron county.

Doench, Theo., .....1607 Ridge ave., .....Philadelphia.  
 Doll, John, .....1512 Peach, .....Erie.  
 Donaghue, James, .....Girardville, .....Schuylkill county.  
 Donaghue, James A., ....Girardville, .....Schuylkill county.  
 Donaghue, Robert L., ....1307 Christian street, .....Philadelphia.  
 Donahue, John P., .....506 Broadway, .....Scranton.  
 Donaldson, H. A., .....Irwin, .....Westmoreland county.  
 Donaldson, Joseph B., ...Canonsburg, .....Washington county.  
 Donecker, Edwin A., ....44 N. 8th, .....Allentown.  
 Donnelly, Clarence E., ..1201 Belmont ave., .....Philadelphia.  
 Donnelly, Wm., .....Galeton, .....Potter county.  
 Donough, Chas. S., .....Lebanon, .....Lebanon county.  
 Doonan, Francis P., .....Dunbar, .....Fayette county.  
 Doritty, Alexander, ....8001 Frankstown ave., ...Pittsburgh.  
 Dorman, Wm. A., .....Phoenixville, .....Chester county.  
 Dornsife, Daniel H., ....Tunkhannock, .....Wyoming county.  
 Dorow, A. O., .....1012 Forbes, .....Pittsburgh.  
 Dosch, Benton G., .....1115 Federal, .....Allegheny.  
 Dosbrow, A. J., .....1500 N. 5th, .....Philadelphia.  
 Doty, Cleon L., .....Canonsburg, .....Washington county.  
 Doubler, Geo. H., .....1344 Spring Garden, .....Philadelphia.  
 Dougal, Chas. H., .....Milton, .....Northumberland county.  
 Dougherty, James T., Jr., Indiana, .....Indiana county.  
 Dougherty, J. E., .....4301 Butler street, .....Pittsburgh.  
 Dougherty, Joseph M., ..Fayetteville, .....Franklin county.  
 Doughett, Geo. S., .....6000 Penn ave., .....Pittsburgh.  
 Douglass, Serrill, .....Bristol, .....Bucks county.  
 Douglass, Wm. T., .....1137 Derry, .....Harrisburg.  
 Downey, Thos., .....Corry, .....Erie county.  
 Drake, John W., .....Cambridge Springs, .....Crawford county.  
 Drake, Theo., .....429 Arch, .....Philadelphia.  
 Dreifoos, Benj. F., .....4106 Ridge ave., .....Philadelphia.  
 Driesbach, Luther A., ....1155 S. 20th, .....Philadelphia.  
 Driggs, Chas. M., .....Sayre, .....Bradford county.  
 Drorbaugh, James E., ....Williamsport, .....Lycoming county.  
 Druitt, Anna B., .....Mt. Oliver, .....Allegheny county.  
 Druitt, Samuel H., .....Mt. Oliver, .....Allegheny county.  
 Drum, Chas. M. M., ....113 Blackman street, ....Wilkes-Barre.  
 Drumheller, F. E., .....406 Market, .....Sunbury.  
 Dubbs, Robert L., .....1013 Cherry, .....Philadelphia.  
 Dubell, Alexander, .....Mt. Holly, .....New Jersey.  
 Duble, Jesse B., .....4th & Pine, .....Williamsport.  
 Duble, Jesse C., .....4th & Pine, .....Williamsport.  
 Dubois, Samuel C., .....1201 Columbia ave., .....Philadelphia.  
 Dudley, Emory G., .....Washington, .....Washington county.  
 Duff, Harry G., .....New Castle, .....Lawrence county.  
 Duff, James E., .....New Castle, .....Lawrence county.  
 Duffield, Harrison, .....2601 N. 6th, .....Philadelphia.  
 Dunaway, Alex. B., .....Fairchance, .....  
 Duncan, H. M., .....63 Federal, .....Allegheny.  
 Dunham, M. M., .....Warren, .....Warren county.  
 Dunlap, Sam. R., .....Beaver Falls, .....Beaver county.  
 Dunn, John B., .....Watson town, .....Northumberland county.

Durbin, John Geo., .....Plymouth, .....Luzerne county.  
 Durham, Albert R., .....16 S. 5th, .....Reading.  
 Dunham, John C., .....Kane, .....McKean county.  
 Durham, John McC., .....16 S. 5th, .....Reading.  
 Durham, Wm. M., .....Corry, .....Erie county.  
 Dutt, Frederick A., .....1011 Arch, .....Philadelphia.  
 Dutton, Albert E., .....Allentown, .....Lehigh county.  
 Dyson, Geo. L., .....Easton, .....Northampton county.  
 Eagon, Elmer E., .....East Liverpool, .....Ohio.  
 Eakin, Henry G., .....301 N. 6th, .....Philadelphia.  
 Earl, Wm., .....Ridgway, .....Elk county.  
 Easterwood, Frank R., ..Meadville, .....Crawford county.  
 Easton, David C., .....Hastings, .....Cambria county.  
 Eaton, Albert M., .....2017 N. 13th, .....Philadelphia.  
 Ebaugh, Wm. C., .....3741 Lancaster ave., .....Philadelphia.  
 Eberhardt, Wm. F., .....719 Ligonier street, .....Latrobe.  
 Eberle, John, .....144 E. 22d, .....Erie.  
 Eberly, David A., .....Mechanicsburg, .....Cumberland county.  
 Eberly, Frank H., .....2500 Oxford, .....Philadelphia.  
 Eberly, J. Addison, .....2500 Oxford, .....Philadelphia.  
 Eberman, Frank L., .....Centerville, .....Crawford county.  
 Eberman, John S., .....Charleroi, .....Washington county.  
 Ebert, Chas. M., .....Mauch Chunk, .....Carbon county.  
 Ebert, Sarah E., .....Mauch Chunk, .....Carbon county.  
 Eble, Charles, .....6009 Penn ave., .....Pittsburgh.  
 Eby, B. M., .....Newport, .....Perry county.  
 Eckels, C. A., .....600 S. Broad, .....Philadelphia.  
 Eckels, Geo. Morris, .....36 E. Main, .....Mechanicsburg.  
 Eckels, Howard S., .....15th & Market, .....Philadelphia.  
 Eckels, Thos. M., .....Ellwood City, .....Lawrence county.  
 Eckels, Walter L., .....36 E. Main, .....Mechanicsburg.  
 Eckert, Abiah L., .....23 W. King, .....Lancaster.  
 Eckert, John W., .....Philadelphia, .....  
 Eckles, Whit A., .....Beaver Falls, .....Beaver county.  
 Eddy, Geo. V., .....4128 Market, .....Philadelphia.  
 Eddy, Henry C., .....423 S. 18th, .....Philadelphia.  
 Edgar, I. Warren, .....Stillwater, .....Col. county.  
 Edie, John B., .....1105 Walnut street, .....McKeesport.  
 Edmondson, Wm. M., ....Renovo, .....Clinton county.  
 Edmunds, Cyrus, .....719 Braddock ave., .....Braddock.  
 Edwards, Chas. M., .....1212 Huntingdon, .....Philadelphia.  
 Edwards, John W., .....510 St. Clair street, .....Pittsburgh.  
 Eft, Frederick, .....1319 N. 12th, .....Philadelphia.  
 Egel, Fredk. Wm., .....59th & Haverford ave., ..Philadelphia.  
 Eggers, Edward E., .....301 Ohio, .....Allegheny.  
 Eggers, Fredk. H., .....541 Ohio, .....Allegheny.  
 Eggers, Fredk. W., .....541 Ohio, .....Allegheny.  
 Ehman, Joseph W., .....220 Vine, .....Philadelphia.  
 Eichelberger, Ell, .....Saxton, .....Bedford county.  
 Eichelberger, John C., ...Saxton, .....Bedford county.  
 Eicke, N. Marion, .....347 Adams ave., .....Scranton.  
 Eller, Edward, .....Meadville, .....Crawford county.  
 Einstein, Morris, .....170 East street, .....Allegheny.

Eisenhart, Harry P., .....16 N. 3d, .....Harrisburg.  
 Eisenhart, Edward K., ..Bangor, .....Northampton county.  
 Eisenhart, Foster B., ....829 N. 26th, .....Philadelphia.  
 Eisenhuth, Jacob, .....Milhelm, .....Centre county.  
 Elden, Wm. McK., .....Roaring Springs, .....Blair county.  
 Eldridge, Samuel B., ....Brooklyn, .....Susquebanna county.  
 Elfreth, Caleb P., .....148 South, .....Philadelphia.  
 Elfreth, Caleb P., Jr., ....148 South, .....Philadelphia.  
 Elfreth, Jacob R., .....2461 Jasper, .....Philadelphia.  
 Ellinger, T. J., .....737 N. 41st, .....Philadelphia.  
 Elliott, Arthur H., .....3221 Hewson, .....Philadelphia.  
 Elliott, James T., .....23 E. Middle, .....Gettysburg.  
 Elliott, Walter R., .....912 Pine, .....Philadelphia.  
 Elliott, Wm. D., .....429 Arch, .....Philadelphia.  
 Ellis, Wardle, .....Media, .....Delaware county.  
 Ellsperman, Chas. W., ..1819 S. 8th, .....Philadelphia.  
 Elm, Paris F., .....Shippensburg, .....Cumberland county.  
 Elrick, John M., .....Harrisville, .....Butler county.  
 Elrick, Richard E., .....Harrisville, .....Butler county.  
 Elwell, Albert S., .....1228 Market, .....Philadelphia.  
 Ely, Chas. S., .....Millville, .....Col. county.  
 Ely, Edwin S., .....Newport, .....Perry county.  
 Ely, Frank W., .....710 Park ave., .....Williamsport.  
 Ely, Harry B., .....Ariel, .....Wayne county.  
 Ely, Richard H., .....Laceyville, .....Wyoming county.  
 Ely, Samuel S., .....1709 N. Sydenham, .....Philadelphia.  
 Emanuel, Louis, .....2d ave. & Grant st., .....Pittsburgh.  
 Emerick, Benj. F., .....Carlisle, .....Cumberland county.  
 Emerick, E. M., .....40 S. Market, .....Shamokin.  
 Emerson, Henry E., .....Milford, .....Pike county.  
 Emery, Ernest H., .....Greenville, .....Mercer county.  
 Emery, Robert G., .....Grove City, .....Mercer county.  
 Emlet, Jacob L., .....Hanover, .....York county.  
 Empfield, Frank T., .....Indiana, .....Indiana county.  
 Endicott, John F., .....891 N. 48th, .....Philadelphia.  
 Engel, Wm. C., .....Meadville, .....Crawford county.  
 England, Joseph W., ....34th & Pine, .....Philadelphia.  
 England, Wm. T., .....4046 Baring, .....Philadelphia.  
 Engle, Stratton R., .....Kirkwood, .....  
 Engler, Robert S., .....506 N. 18th, .....Philadelphia.  
 English, Geo. H., .....Germantown, .....Philadelphia.  
 Ensign, H. C., .....Waymart, .....Wayne county.  
 Ensminger, Samuel A., ..Manheim, .....Lancaster county.  
 Eppstein, Jacob, .....1500 N. 5th, .....Philadelphia.  
 Erdman, Milton S., .....Richlandtown, .....Bucks county.  
 Erney, Albert S., .....1543 Morris, .....Philadelphia.  
 Erskine, Wm. S., .....28 Anderson, .....Allegheny.  
 Ersenwein, Augustus, ....6th & Franklin, .....Reading.  
 Eschbach, C. D., .....2328 E. Norris, .....Philadelphia.  
 Eshbach, Wm. W., .....334 Lehigh ave., .....Allentown.  
 Esler, James M., .....Tarentum, .....Allegheny county.  
 Essick, Howard M., .....Picture Rocks, .....Lycoming county.  
 Estlack, Horace W., .....1233 S. 17th, .....Philadelphia.

Evans, Abner T., .....Franklin & Columbia av., Philadelphia.  
 Evans, Albert O., .....Connellsville, .....Fayette county.  
 Evans, Alex. R., .....Rosemont, .....  
 Evans, Aneurin, .....Kingston, .....Luzerne county.  
 Evans, Edward E., .....Swissvale, .....Allegheny county.  
 Evans, Geo. B., .....1106 Chestnut, .....Philadelphia.  
 Evans, John C., .....Scottdale, .....Westmoreland county.  
 Evans, John H., .....Media, .....Delaware county.  
 Evans, J. Howard, .....6th & Venango, .....Philadelphia.  
 Evans, Joseph S., .....West Chester, .....Chester county.  
 Evans, Myron J., .....301 Filmore ave., .....Scranton.  
 Evans, Samuel, Jr., .....Franklin & Columbia av., Philadelphia.  
 Evans, Thos. B., .....148 School, .....Scranton.  
 Everett, Chas. A., .....Bennett, .....Allegheny county.  
 Eves, Ellis, .....Millville, .....Col. county.  
 Eves, Wm. W., .....Millville, .....Col. county.  
 Ewing, Geo. W., .....710 S. 2d, .....Philadelphia.  
 Ewing, Jackson S., .....Ligonier, .....  
 Eyer, Edward A., .....2500 Jefferson, .....Philadelphia.  
 Eyer, Harvey B., .....Tyrone, .....Blair county.  
 Fackenthall, John M., ...3d & New, .....So. Bethlehem.  
 Fackler, Lewis H., .....E. Berlin, .....Adams county.  
 Faessel, John A., .....11 Somerset, .....Allegheny.  
 Fager, Christian M., .....1223 Ridge ave., .....Harrisburg.  
 Fahey, Edward H., .....1301 Race, .....Philadelphia.  
 Fajans, Julian, .....5107 Ridge ave., .....Philadelphia.  
 Falck, Milton S., .....Lancaster, .....Lancaster county.  
 Falloure, Edwin R., .....2500 N. 33d, .....Philadelphia.  
 Faner, John H., .....12 Delaware ave., .....W. Pittston.  
 Farley, Harvey N., .....Equinunk, .....Wayne county.  
 Farley, Wm. H., .....222 E. Broad, .....Chester.  
 Farnsworth, Anthony, ...12th ave. & 12th st., ....Altoona.  
 Farrell, Francis A., .....Kingston, .....Luzerne county.  
 Farrell, Frank E., .....Johnstown, .....Cambria county.  
 Farrow, Chas. T., .....29th & Columbia ave., ...Philadelphia.  
 Farrow, Fred. R., .....2147 S. 15th, .....Philadelphia.  
 Farver, Rufus C., .....New Lebanon, .....Mercer county.  
 Faull, Glen K., .....Mt. Pleasant, .....Westmoreland county.  
 Faulds, W. H., .....Luzerne, .....Luzerne county.  
 Faulhaber, Gustave A., ..15th & Arch, .....Philadelphia.  
 Faulkner, Chas. P., .....Venango, .....Crawford county.  
 Faunce, Benj. R., .....501 E. Girard street, ....Philadelphia.  
 Faunce, Geo. C., .....3222 Frankford ave., ....Philadelphia.  
 Faust, John K., .....1560 Perkiomen ave., ....Reading.  
 Faust, Peter, .....362 N. River street, ....Wilkes-Barre.  
 Fawcett, John W., .....701 5th ave., .....McKeesport.  
 Feather, Francis F., .....Sandy Lake, .....Mercer county.  
 Feather, H. C. L., .....Sandy Lake, .....Mercer county.  
 Feather, John C., .....Sandy Lake, .....Mercer county.  
 Fegley, Orlando, .....546 N. Front, .....Allentown.  
 Fegley, Oscar G., .....1334 S. 22d, .....Philadelphia.  
 Fegley, Wm. L., .....546 N. Front, .....Allentown.  
 Fehr, Geo. W., .....10th & Vine, .....Philadelphia.

Feicht, Chas. M., .....Reynoldsville, .....Jefferson county.  
 Feidt, Geo. D., .....1422 Poplar, .....Philadelphia.  
 Feinberg, S. E., M. D., ..Scranton, .....Lackawanna county.  
 Felker, Harry, .....So. Bethlehem, .....Northampton county.  
 Fergus, Addison R., ....Washington, .....Washington county.  
 Ferguson, David S., .....2200 Frankford ave., .....Philadelphia.  
 Ferguson, Enoch P., .....Coatesville, .....Chester county.  
 Ferguson, Frank U., .....Gallitzin, .....Cambria county.  
 Ferguson, James A., .....124 W. Thompson, .....Philadelphia.  
 Fernsler, E. K., .....Terre Hill, .....Lancaster county.  
 Fernsler, Edward S., ....109 E. Arch, .....Pottsville.  
 Fernsler, Harry O., .....28 S 4th, .....Reading.  
 Fetteroff, Daniel W., ....36th & Woodland ave., ...Philadelphia.  
 Feters, Frank P., .....801 N. 3d, .....Philadelphia.  
 Feters, Wm. A., .....801 N. 3d, .....Philadelphia.  
 Few, Colin S., .....243 N. 12th, .....Philadelphia.  
 Fiedler, Albert R. H., ....4243 Ridge ave., .....Philadelphia.  
 Field, Wm. S. N., .....8th & Lombard, .....Philadelphia.  
 Fienhold, Edward H., ....13th & Morris, .....Philadelphia.  
 Fies, John H., .....51 S. Lime, .....Lancaster.  
 Fillman, Eugene, .....De Kalb & Jacoby, .....Norristown.  
 Finck, Edward V., .....208 Girard ave., .....Philadelphia.  
 Fink, Allen J., .....Hamberg, .....Berks county.  
 Fink, Geo. W. M., .....Irwin, .....Westmoreland county.  
 Finkbinder, Martin L., ....2d & Diamond, .....Philadelphia.  
 Finkelpearl, Joseph, ....801 5th ave., .....Pittsburgh.  
 Finley, Lensden B., ....819 Penn ave., .....Pittsburgh.  
 Finley, Norval H., .....6638 Deary street, .....Pittsburgh.  
 Finnerty, Edward J., ....1938 S. 13th, .....Philadelphia.  
 Finney, John J., .....York & Douglas, .....Philadelphia.  
 Finney, Wm. E., .....Chambersburg, .....Franklin county.  
 Fischer, Arthur E., ....223 Ohio, .....Allegheny.  
 Fischer, Fredk. F., ....2332 Frankford ave., .....Philadelphia.  
 Fischer, Wm., .....Erie, .....Erie county.  
 Fishburne, Richard L., ..1839 Chestnut, .....Philadelphia.  
 Fishel, Henry W., .....Harrisburg, .....Dauphin county.  
 Fisher, Chas. M., .....Allegheny Hospital, .....Allegheny county.  
 Fisher, Edwin, .....513 N. 9th, .....Reading.  
 Fisher, Edmund K., ....526 E. Indiana ave., .....Philadelphia.  
 Fisher, Franklin, .....Macungie, .....Lehigh county.  
 Fisher, Joshua F., .....Catawissa, .....Col. county.  
 Fisher, K. Ludwick, ....Glen Lyon, .....Luzerne county.  
 Fisher, Margaret E., ....Springboro, .....Crawford county.  
 Fisher, Samuel K., .....18th & Berks, .....Philadelphia.  
 Flster, Thos. W., .....Tamaqua, .....Schuylkill county.  
 Fitch, A. B., .....Factoryville, .....Wyoming county.  
 Fitch, Pelatiah, .....1739 Vine, .....Philadelphia.  
 Fithian, Isaac N., .....Grove City, .....Mercer county.  
 Fitzgerald, Maurice, ....Conneautville, .....Crawford county.  
 Fitzgerald, Samuel W., ..2010 N. 8th, .....Philadelphia.  
 Fitzpatrick, Philip T., ...28 N. Shippen, .....Lancaster.  
 Flagler, Steward, .....Stroudsburg, .....Monroe county.  
 Flanagan, Thos. F., .....25 W. Centre, .....Mahanoy City.



Flecher, Bernard, .....Fryburg, .....Clarion county.  
 Fleming, Arthur B., .....12th & Somerset, .....Philadelphia.  
 Fleming, David W., .....437 N. 8th, .....Philadelphia.  
 Fleming, Frank B., .....Shippensburg, .....Cumberland county.  
 Fleming, Geo. S., .....412 Market, .....Pittsburgh.  
 Fleming, John A., .....Shippensburg, .....Cumberland county.  
 Fleming, Joseph E., .....W. Pittston, .....Luzerne county.  
 Fleming, Walter, .....117 Market, .....Philadelphia.  
 Flenniken, J. Byron, .....426 Ohio, .....Allegheny county.  
 Fletcher, Benj. K., .....1626 Christian, .....Philadelphia.  
 Fletcher, E. B., .....18th & Chestnut, .....Erie.  
 Flexer, Lewis A., .....Tamanend, .....Schuylkill county.  
 Flitcraft, Warren W., ....Woodstown, .....New Jersey.  
 Fluck, Chas. L., .....24th & Montgomery av., Philadelphia.  
 Fluck, Franklin W., .....2400 Ridge ave., .....Philadelphia.  
 Folckemmer, Chas. W., ..Shrewsbury, .....York county.  
 Follmer, Daniel, .....5th & Callowhill, .....Philadelphia.  
 Follmer, J. S., .....Milton, .....Northumberland county.  
 Foltz, John B., .....1839 N. 6th, .....Harrisburg.  
 Fones, James H. D., ....Tionesta, .....Forest county.  
 Foote, James A., .....Canonsburg, .....Washington county.  
 Foote, John A., .....Archbald, .....Lackawanna county.  
 Foote, Mrs. Margaret A.,...Archbald, .....Lackawanna county.  
 Fording, Thos. E., .....106 Wabash ave., .....Pittsburgh.  
 Foresman, Harry B., .....620 State, .....Erie.  
 Forgy, Joseph J., .....938 N. 43d, .....Philadelphia.  
 Forker, Wm. J., .....2450 Wylie ave., .....Pittsburgh.  
 Forney, Chas. M., .....426 Market, .....Harrisburg.  
 Forrest, Albert D., .....4182 Germantown ave., ..Philadelphia.  
 Forrest, Wm. J., .....80 Washington ave., .....Pittsburgh.  
 Forst, Wm. H., .....Lyman, .....Allegheny county.  
 Forsythe, Geo. W., .....Natrona, .....Allegheny county.  
 Forthman, Ferdinand, ...Waynesboro, .....Franklin county.  
 Foster, Whildin, .....Factoryville, .....Wyoming county.  
 Foster, Wm. C., .....Petrolia, .....Butler county.  
 Foulke, Samuel L., .....347 Adams ave., .....Scranton.  
 Fowler, M. N., .....Foxburg, .....Clarion county.  
 Fox, Chas. F., .....266 Arlington ave., .....Pittsburgh.  
 Fox, Francis, .....621 N. American, .....Philadelphia.  
 Fox, Harry E., .....808 N. 17th, .....Philadelphia.  
 Fox, Peter P., .....73d & Woodland ave., ..Philadelphia.  
 Frailey, Wm. O., .....250 E. King, .....Lancaster.  
 Frame, Wallace V., .....810 Holly, .....Philadelphia.  
 Franciscus, Wm. C., .....Lock Haven, .....Clinton county.  
 Francke, Edward O., ....149 E. 71st, .....New York city.  
 Frank, C. Davis, .....1538 Vine, .....Philadelphia.  
 Frank, John A., .....Turtle Creek, .....Allegheny county.  
 Frank, Joseph T., .....Turtle Creek, .....Allegheny county.  
 Frank, Louis, .....South & Lincoln, .....Wilkes-Barre.  
 Frank, Luther B., .....Rebersburg, .....Centre county.  
 Frank, Theo. J., .....1401 Federal, .....Allegheny.  
 Frank, Theron N., .....26 N. 7th, .....Philadelphia.  
 Franke, Frederick, .....719 E. 9th, .....Erie.



|                             |                            |                      |
|-----------------------------|----------------------------|----------------------|
| Franke, Louis, .....        | 245 N. 12th, .....         | Philadelphia.        |
| Frankelberger, Allen J.,... | 13th & Dauphin, .....      | Philadelphia.        |
| Frantz, D. J., .....        | Coal Centre, .....         | Washington county.   |
| Frantz, Geo. W., .....      | Coal Centre, .....         | Washington county.   |
| Frantz, Wm. W., .....       | 5851 Ellsworth ave., ..... | Philadelphia.        |
| Fraunfelder, R. D., .....   | 2262 N. 7th, .....         | Philadelphia.        |
| Freas, S. K., .....         | 2008 N. 17th, .....        | Philadelphia.        |
| Freas, Wm. K., .....        | 1921 Uber, .....           | Philadelphia.        |
| Fredericks, Henry, .....    | 722 N. 43d, .....          | Philadelphia.        |
| Freebing, Otto F., .....    | 231 Frankstown ave., ....  | Pittsburgh.          |
| Freeman, C. L., .....       | 9th & Hamilton, .....      | Allentown.           |
| Freeman, Geo. W., .....     | 3321 N. Broad, .....       | Philadelphia.        |
| Freeman, John W., .....     | Derry, .....               | Westmoreland county. |
| Freeman, Wm., .....         | Ocean City, .....          | New Jersey.          |
| Freethy, Chas. H., .....    | 125 Penn, .....            | Scranton.            |
| French, A. P., .....        | Susquehanna, .....         | Susquehanna county.  |
| French, Chas. S., .....     | Austin, .....              | Potter county.       |
| French, Edward E., .....    | Bentleysville, .....       | Washington county.   |
| French, Frank B., .....     | Coudersport, .....         | Potter county.       |
| French, Francis F., .....   | Merionville, .....         | Montgomery county.   |
| French, Malachi R., .....   | Chicago, .....             | Illinois.            |
| Freshell, Geo., .....       | 3526 Haverford ave., ....  | Philadelphia.        |
| Freseman, Wm. G., .....     | 708 Arch, .....            | Allegheny.           |
| Fretz, Abraham N., .....    | Fleetwood, .....           | Berks county.        |
| Fretz, C. D., .....         | Sellersville, .....        | Bucks county.        |
| Fretz, Oliver H., .....     | Quakertown, .....          | Bucks county.        |
| Frey, Andrew G., .....      | 116 N. Queen, .....        | Lancaster.           |
| Frey, John J., .....        | Aspinwall, .....           |                      |
| Frey, John P., .....        | 16th & Tasker, .....       | Philadelphia.        |
| Frey, John W., .....        | 18th & Berks, .....        | Philadelphia.        |
| Friebely, Harry E., .....   | 4676 Frankford ave., ....  | Philadelphia.        |
| Friedman, Hyman W., ...     | 3d & Monroe, .....         | Philadelphia.        |
| Fries, Chas. J. V., .....   | 1933 Bainbridge, .....     | Philadelphia.        |
| Fritzinger, Richard J., ..  | 131 N. 10th, .....         | Philadelphia.        |
| Fronefield, Joseph M., Jr., | Wayne, .....               | Delaware county.     |
| Frontz, Edward E., .....    | 753 E. 3d, .....           | Williamsport.        |
| Frowert, Chas. G., .....    | 239 N. 12th, .....         | Philadelphia.        |
| Fruh, Carl D. S., .....     | 2445 Ridge ave., .....     | Philadelphia.        |
| Fruh, Ernest, .....         | 2445 Ridge ave., .....     | Philadelphia.        |
| Fruh, Gustav A., .....      | 2445 Ridge ave., .....     | Philadelphia.        |
| Fruh, Mary E. S., .....     | 2445 Ridge ave., .....     | Philadelphia.        |
| Fry, Clinton M., .....      | 672 N. 10th, .....         | Philadelphia.        |
| Fry, Franklin L., .....     | Manor Station, .....       | Westmoreland county. |
| Fry, Harry E., .....        | 31 W. 4th, .....           | Williamsport.        |
| Fry, Hiram P., .....        | Lititz, .....              | Lancaster county.    |
| Fry, Mahlon B., .....       | 2967 Frankford ave., ....  | Philadelphia.        |
| Fry, Nelson B., .....       | 1901 Arch, .....           | Philadelphia.        |
| Fulmer, Geo. W., .....      | Tremont, .....             | Schuylkill county.   |
| Funk, Lawson C., .....      | 4099 Lancaster ave., ....  | Philadelphia.        |
| Funk, Robert R., .....      | 23d & Parrish, .....       | Philadelphia.        |
| Furman, Frank R., .....     | Hazleton, .....            | Luzerne county.      |
| Gabell, C. P., .....        | 5338 Lancaster ave., ....  | Philadelphia.        |
| Gable, Samuel M., .....     | York, .....                | York county.         |

Gabler, Theo. A., .....4320 Main, .....Manayunk.  
 Gabriel, Cassius H., .....Spartansburg, .....Crawford county.  
 Gabriel, Robert R., .....2567 E. Norris, .....Philadelphia.  
 Gabrio, Frank P., .....416 N. Broad, .....Hazleton.  
 Gadd, Samuel W., .....1155 S. 8th, .....Philadelphia.  
 Galbraith, Wm. H., .....Main & Collom, .....Germantown.  
 Gallagher, James F., .....546 N. Front, .....Allentown.  
 Gallagher, James T., .....247 S. 10th, .....Philadelphia.  
 Gallaschick, Paul H., ....230 N. 8th, .....Philadelphia.  
 Gamble, Frank M., .....Jamestown, .....Mercer county.  
 Gamble, Frank W., .....Beamville, .....Allegheny county.  
 Gamble, Jesse R., .....Jamestown, .....Mercer county.  
 Gamble, John M., .....Claysville, .....  
 Gano, Wm. H., Jr., .....17th & Columbia ave., ..Philadelphia.  
 Gans, Chas. C., .....Freeport, .....Armstrong county.  
 Gant, Joseph S., .....Buena Vista, .....Allegheny county.  
 Gantz, John A., .....Lebanon, .....Lebanon county.  
 Garber, Thos. P., .....Greenville, .....Mercer county.  
 Gardner, John H., .....Stoyestown, .....Somerset county.  
 Gardner, Robert J., .....817 S. 17th, .....Philadelphia.  
 Garland, John K., .....1557 Dickson ave., .....Scranton.  
 Garman, J. S., .....Berlin, .....Somerset county.  
 Garretson, Joel R., .....Franklintown, .....York county.  
 Garrison, Joel, Jr., .....4th & Pine, .....Williamsport.  
 Garritt, Henry J., .....711 N. 6th, .....Philadelphia.  
 Garrow, Harry, .....2461 Jasper street, .....Philadelphia.  
 Gartland, Albert A., .....6th ave. & 7th st., .....Altoona.  
 Garver, Walter J., .....1839 Chestnut, .....Philadelphia.  
 Gasaway, John R., .....208 North ave., .....Pittsburgh.  
 Gasslein, Richard J., ....3314 N. 15th, .....Philadelphia.  
 Gatchel, Edmund R., .....10th & Spring Garden, ...Philadelphia.  
 Geary, Frank M., .....2538 E. Clearfield, .....Philadelphia.  
 Geasey, Geo. W., .....1306 Girard ave., .....Philadelphia.  
 Gebheardt, E. W., .....Cambria & Leithgow sts., Philadelphia.  
 Geety, Wallace G., .....17th & York, .....Philadelphia.  
 Geiger, Jacob F. D., .....2454 N. 31st, .....Philadelphia.  
 Geiger, Walter S., .....17th & Huntingdon, .....Philadelphia.  
 Geissenhainer, Harry E., 23 Union ave., .....Allegheny.  
 Gelbert, Daniel G., .....402 S. Washington ave., ..Scranton.  
 George, Chas. T., .....1306 N. 3d, .....Harrisburg.  
 George, James M., .....Phillipsburg, .....Centre county.  
 Gerhard, Alfred Y., .....2262 N. 7th, .....Philadelphia.  
 Gerhard, Luther, .....Front & Susquehanna av., Philadelphia.  
 Gerhard, Samuel, .....Tacony, .....Philadelphia.  
 Gerhard, Wm. H., .....1400 Hanover, .....Philadelphia.  
 Gerry, Elbridge H.,.....Shrewsbury, .....York county.  
 Gerry, James, .....Shrewsbury, .....York county.  
 Gersteneker, Otto, .....527 Summer ave., .....Scranton.  
 Geuther, Fredk. E., .....2441 N. 2d, .....Philadelphia.  
 Gibb, Andrew, .....1 W. Girard ave., .....Philadelphia.  
 Gibble, Elmer E., .....3357 N. 5th, .....Philadelphia.  
 Gibboney, Wm. M., .....Belleville, .....Mifflin county.  
 Gibson, Clifford W., .....McKeesport, .....Allegheny county.

Gibson, Hiester F., .....2148 Green, .....Philadelphia.  
 Glebner, Robert E., .....Sandy Lake, .....Mercer county.  
 Giffard, Wm. H., .....915 Locust, .....Philadelphia.  
 Gilbert, Frank L., .....Knoxville, .....Tioga county.  
 Gilbert, Wm. E., .....Harrison Valley, .....Potter county.  
 Gill, Chas. A., .....29th & Diamond, .....Philadelphia.  
 Gillespie, Chas. B., .....Freeport, .....Armstrong county.  
 Gillespie, E. N., .....Freeport, .....Armstrong county.  
 Gillespie, Wallace G., ....2407 Kensington ave, ....Philadelphia.  
 Gillespie, Wm. A., .....1836 Tasker street, .....Philadelphia.  
 Gillette, Lester C., .....Towanda, .....Bradford county.  
 Gillette, Orville R., .....North East, .....Erle county.  
 Gillis, Claudius V., .....Kane, .....McKean county.  
 Gillis, James H., .....Kane, .....McKean county.  
 Gilmore, Hugh R., .....Emlenton, .....Venango county.  
 Gingrich, Edward H., ....Lebanon, .....Lebanon county.  
 Gingrich, Ezra H., .....3210 Frankford ave., .....Philadelphia.  
 Givens, Chas. A., .....McKees Rocks, .....Allegheny county.  
 Glamser, Anton, .....113 Federal, .....Allegheny.  
 Glassford, S. J., .....Penn Run, .....Indiana county.  
 Gleim, Adolph, .....1417 Clearfield, .....Philadelphia.  
 Gleim, Francis H. E., ....Lebanon, .....Lebanon county.  
 Gleim, Perry M., .....541 Ohio, .....Allegheny county.  
 Glenn, Wm. S., .....State College, .....Centre county.  
 Glick, Geo. C., .....Pittston, .....Luzerne county.  
 Godfrey, John, .....214 Lehigh ave., .....Philadelphia.  
 Goehrig, Thos. M., .....525 E. 3d, .....Williamsport.  
 Goehrig, Wm., .....525 E. 3d, .....Williamsport.  
 Goehring, John G., .....West Newton, .....Westmoreland county.  
 Goess, Geo. C., Jr., .....Roxborough, .....Philadelphia.  
 Goff, Wm. B., .....Wellsboro, .....Tioga county.  
 Goldsmith, Edwin R., ...Braddock, .....Allegheny county.  
 Goldsmith, Geo. W., .....7th & Thompson, .....Philadelphia.  
 Goldsmith, Henry B., ....West Newton, .....Westmoreland county.  
 Goldsmith, Lee, .....1708 Marshall, .....Philadelphia.  
 Goll, Philip, .....21st & Montgomery ave., Philadelphia.  
 Good, Adrianna, .....Frankford, .....Philadelphia.  
 Good, Benj. M., .....251 E. Frederick, .....Philadelphia.  
 Good, Harvey J. T., .....Allentown, .....Lehigh county.  
 Good, John F., .....New Cumberland, .....Cumberland county.  
 Good, Robert F., .....320 N. 8th, .....Allentown.  
 Good, Wm. F. P., .....917 Turner, .....Allentown.  
 Goodlin, Elmer E., .....Saltsburg, .....Indiana county.  
 Goodman, Edward E., ..812 8th ave., .....Altoona.  
 Goodwin, John W., .....Bennett, .....Allegheny county.  
 Goodyear, Harry J., .....Cornwall, .....Lebanon county.  
 Goodyear, M. S., .....34th & Walnut, .....Philadelphia.  
 Goos, Charles, .....3d & Brown, .....Philadelphia.  
 Gordon, Frank, .....5 S. Main, .....Pittston.  
 Gordon, Fredk. T., .....2957 Ella street, .....Philadelphia.  
 Gordon, John F., .....Rochester, .....Beaver county.  
 Gordon, Willis G., .....Towanda, .....Bradford county.  
 Gordon, Wm. H., .....4262 Frankford ave., .....Philadelphia.

Gordon, Wm. T., .....Rochester, .....Beaver county.  
 Gorgas, Geo. A., .....16 N. 3d, .....Harrisburg.  
 Gorman, Patrick J., .....So. Bethlehem, .....Northampton county.  
 Gosh, Elizabeth J., .....Danville, .....Montour county.  
 Gosh, Wm. E., .....Danville, .....Montour county.  
 Gosser, J. J., .....Emlenton, .....Venango county.  
 Gossling, Thos. R., .....1470 N. 52d, .....Philadelphia.  
 Gotwalt, S. Horace, .....334 E. King, .....York.  
 Gould, John R., .....Bell Bend, .....  
 Gracey, A. A., .....2302 N. 12th, .....Philadelphia.  
 Grady, Geo. W., .....Norristown, .....Montgomery county.  
 Grady, Wm. P., .....1401 Fairmount ave., ....Philadelphia.  
 Graf, Chas. L., .....300 California ave., .....Allegheny.  
 Graff, Emil, .....24 N. 13th, .....Philadelphia.  
 Graham, Edward W., ....Clearfield, .....Clearfield county.  
 Graham, Frank R., ..,....Shiloh & Sycamore, .....Pittsburgh.  
 Graham, Geo. H., .....28 N. 12th, .....Philadelphia.  
 Graham, Geo. M., .....Buttercup, .....  
 Graham, Geo. P. G., ....46 S. 5th, .....Indiana.  
 Graham, John D., .....Leechburg, .....Armstrong county.  
 Graham, Robert, .....Brownsville, .....Fayette county.  
 Granger, Lewis E., .....Rush, .....Susquehanna county.  
 Grantz, Geo. P., .....1413 5th ave., .....Pittsburgh.  
 Graver, James D., .....Royers Ford, .....Montgomery county.  
 Graves, Frank M., .....Jermyn, .....Lackawanna county.  
 Graves, John M., .....Jermyn, .....Lackawanna county.  
 Green, Chas. V., .....Bradford, .....McKean county.  
 Green, B. Wallace, .....6th & Buttonwood, .....Philadelphia.  
 Green, Elisha, .....Plumville, .....Indiana county.  
 Green, Francis P., .....Bellefonte, .....Centre county.  
 Green, Howard L., .....28th & Columbia ave., ...Philadelphia.  
 Green, Howard M., .....721 Centre, .....Williamsport.  
 Green, J. Harris, .....Bellefonte, .....Centre county.  
 Green, John W., .....Kinzua, .....Warren county.  
 Green, Thos. A., .....Bradford, .....McKean county.  
 Green, Wm. V., .....348 N. 9th, .....Reading.  
 Greenawald, Benj. S., ....1005 Market, .....Pottsville.  
 Greenawalt, David L., ...Chambersburg, .....Franklin county.  
 Greenawalt, Wm. G., ....Chambersburg, .....Franklin county.  
 Greenberg, Jacob, .....330 Federal, .....Philadelphia.  
 Greene, Ellsworth H., ...Chadds Ford, .....Delaware county.  
 Greene, Frank N., .....1048 N. Front, .....Philadelphia.  
 Greenfield, Lewis T., .....518 Smithfield, .....Philadelphia.  
 Greenman, Dexter, .....New Hamburg, .....Mercer county.  
 Greer, Harry L., .....130 S. Main, .....Greensburg.  
 Gregory, John E., .....Gordon, .....Schuylkill county.  
 Greineisen, F. C., .....192 Main, .....Pittsburgh.  
 Grenville, Thos. B., .....Tunkhannock, .....Wyoming county.  
 Gress, Edward, .....Pitcairn, .....Allegheny county.  
 Gressley, Wm. R., .....30 N. Beaver, .....York.  
 Griesemer, James A., ....2758 N. 15th, .....Philadelphia.  
 Griest, Joseph F., .....4434 Lancaster ave., .....Philadelphia.  
 Griffin, Howard E., .....1917 N. Main ave., .....Scranton.

Griffith, Albert R., .....Oil City, .....Venango county.  
 Griffith, Edward J., .....Oil City, .....Venango county.  
 Griffith, Fred. T., .....Oil City, .....Venango county.  
 Griffith, John L., .....Taylorville, .....Lackawanna county.  
 Griffith, John W., .....Kane, .....McKean county.  
 Griffith, Joseph F., .....1506 N. 8th, .....Philadelphia.  
 Griffith, Thos. B., .....Montoursville, .....Lycoming county.  
 Griffith, Wm. C., .....Marion Centre, .....Indiana county.  
 Griffith, Wm. H., .....Oil City, .....Venango county.  
 Grimshaw, James B., ....Scranton, .....Lackawanna county.  
 Griswold, Chas. M., .....1249 Bailey, .....Harrisburg.  
 Groff, Frank B., .....44th & Lancaster ave., ..Philadelphia.  
 Groff, Harry M., .....1700 Mt. Vernon, .....Philadelphia.  
 Groff, John C., .....Mt. Joy, .....Lancaster county.  
 Grohmann, E. J. C., .....109 N. Main, .....Butler.  
 Groom, E. W., .....Bristol, .....Bucks county.  
 Groome, John C., .....Carlisle, .....Cumberland county.  
 Gross, C. L., .....Pen Argyl, .....Northampton county.  
 Gross, Edward Z., .....119 Market, .....Harrisburg.  
 Gross, Ernest A., .....Wyoming, .....Luzerne county.  
 Gross, Michael J., .....459 5th ave., .....McKeesport.  
 Gross, Paul H., .....326 Haynes street, .....  
 Grossman, Robert J., ....408 Centre ave., .....Butler.  
 Grotevent, J. Fredk., ....1133 S. Broad, .....Philadelphia.  
 Grotz, Milton, .....2200 Franklin, .....Philadelphia.  
 Grove, John E., .....2131 Hicks, .....Philadelphia.  
 Grover, Meredith E., ....Freeland, .....Luzerne county.  
 Grover, Warren W., ....Kingston, .....Luzerne county.  
 Groves, John D., .....801 S. Front, .....Philadelphia.  
 Grube, Joseph M., .....Lindsey, .....Jefferson county.  
 Gruel, John E., .....2407 Fairmount ave., ....Philadelphia.  
 Gruhler, Christian, .....Shenandoah, .....Schuylkill county.  
 Gruhler, Martin, .....Shenandoah, .....Schuylkill county.  
 Grunden, P. E., .....363 S. 2d, .....Steelton.  
 Gruver, Chas. D., .....Stroudsburg, .....Monroe county.  
 Gryning, John F., .....2605 Potter, .....Philadelphia.  
 Gubbins, Chas. H., .....15th & Race, .....Philadelphia.  
 Guest, Samuel S., .....613 N. 4th, .....Philadelphia.  
 Guest, Wilbert H., .....18th & Susquahanna ave., Philadelphia.  
 Guise, P. Nettleton, .....U. S. N. Hospital, .....Philadelphia.  
 Gunn, C. T., .....Springboro, .....Crawford county.  
 Gutellus, Edwin S., .....2921 Penn ave., .....Pittsburgh.  
 Gutellus, Mrs. Lydia E.,...2921 Penn ave., .....Pittsburgh.  
 Guth, Harry L., .....1019 7th ave., .....Beaver Falls.  
 Guth, Herbert W., .....527 Liberty, .....Allentown.  
 Guthrie, Clinton, .....742 N. 38th, .....Philadelphia.  
 Haak, Harry C., .....320 Lackawanna ave., ...Scranton.  
 Hackenberger, Geo. W., ..Bainbridge, .....Lancaster county.  
 Hackenberger, G. W., Jr., Bainbridge, .....Lancaster county.  
 Hackett, Henry J., .....768 Passyunk ave., .....Philadelphia.  
 Hackney, Geo. W., .....Uniontown, .....Fayette county.  
 Hadley, Harry C., .....Wayne, .....Chester county.  
 Haenchen, Emil F., .....3844 Haverford ave., .....Philadelphia.

Haentze, Chas. H., ..... Mahanoy City, ..... Schuylkill county.  
 Haering, Geo. V., ..... 123 Ohio street, ..... Allegheny.  
 Haering, David, ..... 115 Juniata street, ..... Allegheny.  
 Hagenbuch, Chas. H., ... Shenandoah, ..... Schuylkill county.  
 Hagenbuch, Dr. J. B., .... 1118 S. 46th, ..... Philadelphia.  
 Hagenbuch, James H., .. Mahanoy City, ..... Schuylkill county.  
 Hague, Wm. H., ..... 6219 Penna. ave., ..... Pittsburgh.  
 Hahn, Edward T., ..... So. Easton, ..... Northampton county.  
 Hahn, Herman F., ..... 2221 N. 3d, ..... Harrisburg.  
 Hahn, John H., ..... 1155 S. 20th, ..... Philadelphia.  
 Haig, Chas. R., ..... 1901 Master, ..... Philadelphia.  
 Haig, Chas. R., Jr., .... 1901 Master, ..... Philadelphia.  
 Hainer, Robert M., ..... New Castle, ..... Lawrence county.  
 Haines, Chas. A., ..... Le Roy, ..... Bradford county.  
 Haines, Chas. H., ..... 2602 Germantown ave., ... Philadelphia.  
 Haines, Oliver B. J., .... 813 Hamilton, ..... Allentown.  
 Hair, Edward, ..... Roaring Springs, ..... Blair county.  
 Hair, Wilson E., ..... Roaring Springs, ..... Blair county.  
 Haley, John B., ..... New Castle, ..... Lawrence county.  
 Hall, Chas. H., ..... 393 S. Main, ..... Wilkes-Barre.  
 Hall, J. Barkley, ..... Norristown, ..... Montgomery county.  
 Hall, J. Willis, ..... Sayre, ..... Bradford county.  
 Hall, Peter, ..... Erie, ..... Erie county.  
 Hall, Robert C., ..... Franklin, ..... Venango county.  
 Hall, Thos. M., ..... 501 Main, ..... Johnstown.  
 Hall, Wm. D. W., ..... 527 Reed, ..... Philadelphia.  
 Hall, Wm. T., ..... Avenue, ..... Allegheny county.  
 Hamaker, Daniel H., .... Duke street, ..... Lancaster.  
 Hamberg, Samuel F., .... 942 N. 12th, ..... Philadelphia.  
 Hamilton, Chas. E., .... 130 N. 10th, ..... Philadelphia.  
 Hamilton, John D., .... Coraopolis, ..... Allegheny county.  
 Hamilton, Sylvester S., .. Punxsutawney, ..... Jefferson county.  
 Hamilton, Thos. J., .... Butler, ..... Butler county.  
 Hamilton, Willis, M. D., .. Kennett Square, ..... Chester county.  
 Hamilton, Wm. H., ..... Beaver Falls, ..... Beaver county.  
 Hamilton, Wm. H., ..... Thomas, ..... Washington county.  
 Hamman, Wm. E., ..... 4th & Northampton, .... Easton.  
 Hammond, Arthur B., .... West Chester, ..... Chester county.  
 Hammond, Chas. M., .... West Chester, ..... Chester county.  
 Hammond, C. N., ..... Bentley Creek, ..... Bradford county.  
 Hammond, Nathan B., ... 13 N. Church street, .... West Chester.  
 Hammond, Samuel K., ... West Chester, ..... Chester county.  
 Hance, Mrs. L. H., ..... 35 N. 59th, ..... Philadelphia.  
 Hancock, Chas. W., .... Langhorne, .....  
 Haney, Mary A., ..... Norristown, ..... Montgomery county.  
 Hanna, Francis H., ..... Springdale, ..... Allegheny county.  
 Hannan, Frank W., .... Johnstown, ..... Cambria county.  
 Hannum, John L., ..... 221 N. Olive, ..... Philadelphia.  
 Hansmann, Geo., ..... 1616 Columbia ave., ..... Philadelphia.  
 Harbaugh, Geo. E., ..... Waynesboro, ..... Franklin county.  
 Harbaugh, W. L., ..... Haverford, ..... Montgomery county.  
 Harbold, Curtis A., ..... 2621 Girard ave., ..... Philadelphia.  
 Hard, James I., ..... 513 Chestnut, ..... Sunbury.



Harders, Mac Thomas, ...801 S. Broad, .....Philadelphia.  
 Harding, Henry, .....Mt. Pleasant Mills, .....Snyder county.  
 Harding, Henry, .....10th & Lombard, .....Philadelphia.  
 Harding, Sanford, .....Milton, .....Northumberland county.  
 Hardy, Geo., .....Carnegie, .....Allegheny county.  
 Hardy, Robert J., .....Carnegie, .....Allegheny county.  
 Hare, Albert, .....815 5th ave., .....McKeesport.  
 Hargrave, Omar P., .....Duquesne, .....Allegheny county.  
 Hargreaves, Thos. W., ...2725 N. Front, .....Philadelphia.  
 Haring, Henry G., .....7th & Diamond, .....Philadelphia.  
 Harley, Fred. O., .....Bellevue, .....Allegheny county.  
 Harner, F. R., .....Danville, .....Montour county.  
 Harpel, Luther G., .....524 N. 7th, .....Lebanon.  
 Harrigan, John W., .....2321 Wharton, .....Philadelphia.  
 Harris, Chas. M., .....125 Penn ave., .....Scranton.  
 Harris, Clarence M., .....1500 S. 13th, .....Philadelphia.  
 Harris, Daniel M., .....4000 Girard ave., .....Philadelphia.  
 Harris, E. Park, .....West Chester, .....Chester county.  
 Harris, Geo. W., .....1947 Christian, .....Philadelphia.  
 Harris, J. C., .....Venango, .....Crawford county.  
 Harris, Marshall D., .....Bradford, .....McKean county.  
 Harris, Norton O., .....601 Pine, .....Philadelphia.  
 Harris, Wm., .....Hamburg, .....Berks county.  
 Harris, Wm., .....21st & Pine, .....Philadelphia.  
 Harrison, F. E., .....Ridley Park, .....Delaware county.  
 Harrison, Woodward C.,...St. Clairsville, .....Ohio.  
 Harry, H. Maxwell, .....Conshohocken, .....Montgomery county.  
 Harry, James W., .....Conshohocken, .....Montgomery county.  
 Hart, De Forest, .....Bradford, .....McKean county.  
 Hart, Edward A., .....400 Rebecca, .....Allegheny.  
 Hart, Geo. F., .....628 Campbell, .....Williamsport.  
 Hart, Joseph A., .....1202 N. 5th, .....Philadelphia.  
 Hart, W. D., .....Bradford, .....McKean county.  
 Harter, Walter E., .....Plymouth, .....Luzerne county.  
 Hartman, Frank G., .....136 N. Duke, .....Lancaster.  
 Hartman, Harry Y., .....Orwigsburg, .....Schuylkill county.  
 Hartman, Henry L., .....403 N. 10th, .....Lebanon.  
 Hartman, J. Kabel, .....West Chester, .....Chester county.  
 Hartman, Steele G., .....Indiana, .....Indiana county.  
 Hartman, Steve C., .....Lansdale, .....Montgomery county.  
 Hartung, Carl E. B., .....1817 Linton street, .....Pittsburgh.  
 Hartwig, Carl, .....4016 Butler, .....Pittsburgh.  
 Hartzell, A. K., .....835 Linden, .....Allentown.  
 Hartzell, Wm. L., .....2649 Germantown ave., ..Philadelphia.  
 Harvey, Chas. B., .....Kennett Square, .....Chester county.  
 Harvey, Chas. J., .....112 S. Main, .....Butler.  
 Harvey, E. G., .....3103 Baring, .....Philadelphia.  
 Harvey, N. C., .....Glen Campbell, .....Indiana county.  
 Hassinger, Samuel E. R., 23d & Fairmount ave., ...Philadelphia.  
 Hatfield, Mrs. Lena E., ..Tunkhannock, .....Wyoming county.  
 Hatfield, Samuel G., .....Tunkhannock, .....Wyoming county.  
 Hatfield, Supplee S., .....Tunkhannock, .....Wyoming county.  
 Hauck, John F., .....52 N. 36th, .....Philadelphia.

Haus, Ralph L., .....1204 Hutchinson, .....Philadelphia.  
 Hause, Geo. S., .....York, .....York county.  
 Hause, Robert M., .....York, .....York county.  
 Haussman, Fredk. W., ..1629 N. 8th, .....Philadelphia.  
 Haviland, Sanford C., ....Erie, .....Erie county.  
 Hay, Chas. L., .....Du Bois, .....Clearfield county.  
 Hay, Harry A., .....York, .....York county.  
 Hay, John W., .....1402 N. 3d, .....Harrisburg.  
 Hay, La Mar S., Jr., .....Du Bois, .....Clearfield county.  
 Hay, Marlon R., .....Sharon, .....Mercer county.  
 Haydock, Susannah G., ..2147 Locust, .....Philadelphia.  
 Hayes, James F., .....13th & Walnut, .....Philadelphia.  
 Hayes, John C., .....1001 Wylie ave., .....Pittsburgh.  
 Hayes, Robert G. H., ....Bellefonte, .....Centre county.  
 Hayes, Wm. N., .....13th & Walnut, .....Philadelphia.  
 Hayhurst, Henry T., ....6117 Germantown ave., ..Philadelphia.  
 Hayhurst, Susan, .....22d & N. College ave., ..Philadelphia.  
 Haymaker, Milo M., .....65 Rebecca, .....Allegheny.  
 Hays, Joseph A., .....147 S. 18th, .....Pittsburgh.  
 Hazlett, Alfred W., .....Tarentum, .....Allegheny county.  
 Headley, Harry H., .....Bristol, .....Bucks county.  
 Healy, Joseph, .....409 S. 22d, .....Philadelphia.  
 Heard, Mary K., .....North East, .....Erie county.  
 Hebsacker, Wm. F., .....531 W. York, .....Philadelphia.  
 Heck, Emile E., .....Smithfield & Liberty, ....Pittsburgh.  
 Heck, Fred. H., .....Bakerstown, .....Allegheny county.  
 Heckel, Henry W., .....289 Western ave., .....Allegheny.  
 Heckenberger, Wm., ....Catasauqua, .....Lehigh county.  
 Hecker, Jacob K., .....Willow Grove, .....Montgomery county.  
 Heckerman, Adam B., ....Port Royal, .....Juniata county.  
 Heckerman, Edward D.,...Bedford, .....Bedford county.  
 Heckerman, Matthew P., Bedford, .....Bedford county.  
 Hecker, Franklin J., Jr., Columbia, .....Lancaster county.  
 Heckman, John Geo., ....236 W. 12th, .....Philadelphia.  
 Heffley, Harry B., .....326 Bedford, .....Johnstown.  
 Heffner, Edgar F., .....Lock Haven, .....Clinton county.  
 Heiberger, Eugene S., ....29th & Gordon, .....Philadelphia.  
 Heidenreich, Wm. F., ....Elliott borough, .....Allegheny county.  
 Helges, Wm. Smith, .....3 E. Market, .....York.  
 Hellman, Amos B., .....Duquesne, .....Allegheny county.  
 Hellman, Robert B., .....Lebanon, .....Lebanon county.  
 Heim, Christian, Jr., ....1424 East street, .....Philadelphia.  
 Heim, Henry L., .....522 Diamond, .....Philadelphia.  
 Heim, Wm. J., .....1501 N. 10th, .....Philadelphia.  
 Heinback, Frank W., ....21 N. Ohio ave., .....Atlantic City, N. J.  
 Heineberg, Alfred, .....145 N. 10th, .....Philadelphia.  
 Heintsh, Sigmund W., ..16 E. King, .....Lancaster.  
 Heintzelman, J. A., .....2000 Ridge ave., .....Philadelphia.  
 Helser, Edwin S., .....Lewisburg, .....Union county.  
 Helser, Elmer E., .....Bethlehem, .....Northampton county.  
 Helser, W., .....335 S. Duke, .....York.  
 Helstand, Wm. H., .....117 W. Girard ave., .....Philadelphia.  
 Heltshu, Daniel H., .....311 N. Queen, .....Lancaster.



Helfrich, L. S., .....Colwyn, .....Delaware county.  
 Heller, J. A., .....Factoryville, .....Wyoming county.  
 Hellerbach, Peter A., ....1251 Penn ave., .....Pittsburgh.  
 Hellmich, Maximilian, ..2300 Berks, .....Philadelphia.  
 Hellwig, Hattie E., .....Austin, .....Potter county.  
 Hellyer, Edwin F., .....Newtown, .....Bucks county.  
 Helm, Gustav C. F., Jr., ..3d & Morris, .....Philadelphia.  
 Hemberger, Paul E., ....1336 Green, .....Philadelphia.  
 Henderson, A. K., .....280 Frankstown ave., ....Pittsburgh.  
 Henderson, Edward B., ..Brookville, .....Jefferson county.  
 Henderson, Fred. B., ....Brookville, .....Jefferson county.  
 Henderson, Randal W., ..Avalon, .....Allegheny county.  
 Henderson, Robert H., ..18 W. 3d, .....Chester.  
 Henderson, Robert D., ...280 Frankstown ave., ....Pittsburgh.  
 Henderson, Walter L., ..Avalon, .....Allegheny county.  
 Hendrickson, Chas. P., ...1745 N. 22d, .....Philadelphia.  
 Henkel, Luther S., .....1012 Pine, .....Philadelphia.  
 Hennage, Arthur H., ....Bradford, .....McKean county.  
 Henritzy, Oscar E., .....249 N. 12th, .....Philadelphia.  
 Henry, Samuel C., .....508 S. 61st, .....Philadelphia.  
 Hensel, H. Curtis, .....19th & York, .....Philadelphia.  
 Henszey, Samuel C., .....34th & Hamilton, .....Philadelphia.  
 Henwood, Chas., .....1909 Main ave., .....Scranton.  
 Henwood, Sidney R., .....1909 Main ave., .....Scranton.  
 Hepler, Albert J., .....New Bethlehem, .....  
 Herbst, Fred. J., .....2457 N. 5th, .....Philadelphia.  
 Hering, Edwin A., .....906 7th ave., .....Altoona.  
 Herman, Wm. F., .....1926 Carson, .....Pittsburgh.  
 Hermann, Theo. J., .....4116 Penn ave., .....Hamilton.  
 Hermany, Phaon, .....Mahanoy City, .....Schuylkill county.  
 Herr, Elias B., .....334 E. King, .....Lancaster.  
 Herrlein, Arno W., .....New Castle, .....Lawrence county.  
 Herrmann, Ernest W., ..716 Race, .....Philadelphia.  
 Herrmann, Wm., .....Pottsville, .....Schuylkill county.  
 Hersb, Alfred C., .....12th & Lebanon, .....Lebanon.  
 Hershey, E. R., .....122 S. Queen, .....Lancaster.  
 Hertel, Fredk., .....2683 Frankford ave., ....Philadelphia.  
 Hertel, Julius E., .....801 N. 3d, .....Philadelphia.  
 Hertz, Alfred H., .....Warren, .....Warren county.  
 Hertsch, Bernhard A., ...104 N. 6th, .....Philadelphia.  
 Herwirsch, Chas., .....2039 Columbia ave., .....Philadelphia.  
 Herzog, Albert, .....3d & Penn, .....Chester.  
 Hess, Edwin H., .....1530 Ridge ave., .....Harrisburg.  
 Hess, Harry R., .....2339 Albion, .....Philadelphia.  
 Hess, Harvey, F., .....Lehigh, .....  
 Hess, Isaac C., .....Duncansville, .....Blair county.  
 Hess, James M., .....Mauch Chunk, .....Carbon county.  
 Hess, Miles R., .....2941 Fairfield street, ....Philadelphia.  
 Hesske, A. R., .....13th & Poplar, .....Philadelphia.  
 Hetherington, Thos., .....3016 Germantown ave., ..Philadelphia.  
 Hetrick, Annie L., .....Wellsville, .....York county.  
 Hetrick, D. A., .....Indiana, .....Indiana county.  
 Hetrick, R. D., .....Indiana, .....Indiana county

Heverly, Fred. C., .....1019 Vine, .....Philadelphia.  
 Hewitt, Andrew C., .....3807 Germantown ave., ..Philadelphia.  
 Hewitt, Chas. E., .....523 Wood, .....Pittsburgh.  
 Hewitt, Lemuel E., .....Wylie ave. & Fulton, ...Pittsburgh.  
 Heyl, Chas. A., .....1940 Federal, .....Philadelphia.  
 Heyl, F. W., .....722 S. 22d, .....Philadelphia.  
 Heymann, Alfred, .....808 Wharton, .....Philadelphia.  
 Heysham, Horace B., ....225 E. Jacoby, .....Norristown.  
 Hickman, Thos. E., .....Bustleton, .....  
 Hickman, Wm. H., .....336 S. 2d, .....Philadelphia.  
 Hieber, Geo. A., .....1745 5th ave., .....Pittsburgh.  
 Hieber, Theo. W. D., .....1251 Penn ave., .....Pittsburgh.  
 Hiestand, Daniel, .....221 N. 8th, .....Allentown.  
 Hiestand, John S., .....665 N. 15th, .....Philadelphia.  
 Hiffmeyer, Wm. J., .....900 N. 8th, .....Philadelphia.  
 Higbee, Wm. S., .....544 Tasker street, .....Philadelphia.  
 Higgate, Wilford O., .....822 N. 41st, .....Philadelphia.  
 Higgins, Jonathan M., ..1961 Germantown ave., ..Philadelphia.  
 High, Raymond, .....3241 N. 15th, .....Philadelphia.  
 Hildebrand, Henry H., ..Worth, .....Mercer county.  
 Hildebrand, Thos. E., ....Indiana, .....Indiana county.  
 Hile, Isaiah W., .....251 Market, .....Sunbury.  
 Hileman, Geo. F., .....Dallas, .....Luzerne county.  
 Hill, Geo. S., .....Sayre, .....Bradford county.  
 Hill, Jacob F., .....Nanticoke, .....Luzerne county.  
 Hill, Justin L., .....713 Hepburn, .....Williamsport.  
 Hill, Samuel H., .....Corry, .....Erie county.  
 Hill, Smith W., .....Hope Church ,.....Allegheny county.  
 Hill, Theo. T., .....4724 Liberty ave., .....Pittsburgh.  
 Hill, Wm. M., .....23d & Callowhill, .....Philadelphia.  
 Hillan, John M., .....Shenandoah, .....Schuylkill county.  
 Hillegas, Oliver J., .....1206 N. 6th, .....Harrisburg.  
 Hillier, Joseph W., .....West Middlesex, .....Mercer county.  
 Hilpert, Wm., .....2040 Lawrence, .....Philadelphia.  
 Hilton, Henry B., .....Kittanning, .....Armstrong county.  
 Hilton, Thos. C., .....Lock Haven, .....Clinton county.  
 Himmelberger, H. W., ..Jonestown, .....Lebanon county.  
 Himmelwright, F. E., ...313 Diamond, .....Philadelphia.  
 Hindman, Homer C., ....W. Sunbury, .....Butler county.  
 Hine, Marks P., .....801 N. 45th, .....Philadelphia.  
 Hines, Joseph, .....Athens, .....Bradford county.  
 Hines, P. H. T., .....3508 Sydenham, .....Philadelphia.  
 Hines, Sabrina A., .....Athens, .....Bradford county.  
 Hinkle, Samuel W., .....Columbia, .....Lancaster county.  
 Hinkson, Wm. E., .....Lansdowne, .....  
 Hiorns, Lucien F., .....937 Irving ave., .....Scranton.  
 Hippler, Harry R., .....26 Meehan ave., .....Germantown.  
 Hirth, Walter J., .....Homestead, .....Allegheny county.  
 Hite, Franklin, .....Connellsville, .....Fayette county.  
 Hixenbaugh, Wm. S., ....7th & Liberty, .....Pittsburgh.  
 Hixson, Jesse L., .....Wayne, .....Delaware county.  
 Hoagland, Wm. J., .....Hazleton, .....Luzerne county.  
 Hoch, Aquila, .....541 E. Thompson street, ..Philadelphia.

Hoch, Quintus, .....543 E. Thompson street, ..Philadelphia.  
 Hodgkins, Chas. W., .....Patton, .....Cambria county.  
 Hodgkins, Israel M., .....New Haven, .....Fayette county.  
 Hodgson, James N., .....22 N. Centre, .....Pottsville.  
 Hodgson, Thos. S., .....Rochester, .....Beaver county.  
 Hodil, Frank D., .....Sharpsburg, .....Allegheny county.  
 Hodil, James J., .....Sharpsburg, .....Allegheny county.  
 Hodil, John S., .....1705 Buena Vista, .....Allegheny.  
 Hoduett, Alfred T. G., ...117 S. George street, .....York.  
 Hoechstetter, Hugo, ....26 Grape street, .....Pittsburgh.  
 Hoehn, Wm., .....297 East street, .....Allegheny.  
 Hoffa, Chas. W., .....Dushore, .....Sullivan county.  
 Hoffa, J. Wilson, .....1342 N. 6th, .....Harrisburg.  
 Hoffecker, Luther R., ....3108 Ridge ave., .....Philadelphia.  
 Hoffman, Harry N., .....Lewisburg, .....Union county.  
 Hoffman, James L., ....13th & Linden, .....Allentown.  
 Hoffman, N. J., .....929 Washington street, ..Washington.  
 Hoffman, Wm. A., .....Renovo, .....Clinton county.  
 Hoft, Wm. Irving, .....807 Passyunk, .....Philadelphia.  
 Hoge, Geo. W., .....201 N. Highland ave., ....Pittsburgh.  
 Hoguet, Louis A., .....Bristol, .....Bucks county.  
 Hohl, August, .....341 Girard ave., .....Philadelphia.  
 Hohl, Stewart M., .....Easton, .....Northampton county.  
 Hoke, Martin, .....Spring Forge, .....York county.  
 Holberg, Ferdinand, ....2158 N. 19th, .....Philadelphia.  
 Holcomb, Chas. D., .....Roaring Springs, .....Tioga county.  
 Holcomb, Frank B., .....Westfield, .....Tioga county.  
 Holcombe, David H., ....Bridgeton, .....New Jersey.  
 Holden, Frederick E., ....301 Federal street, .....Allegheny.  
 Holden, Louis H., .....301 Federal street, .....Allegheny.  
 Holland, A. J. F., .....603 Gray's Ferry Road, ..Philadelphia.  
 Holland, Alfred P., .....Du Bois, .....Clearfield county.  
 Holland, Edgar A., ....4147 Parrish, .....Philadelphia.  
 Holland, Geo., .....603 Gray's Ferry Road, ..Philadelphia.  
 Holland, Samuel S., .....Smithfield & Liberty, ....Pittsburgh.  
 Hollander, Joseph M., ....915 Braddock ave., .....Braddock.  
 Hollenback, David S.,....Shamokin, .....Northumberland county.  
 Holliday, John Thos., ...2314 S. 12th, .....Philadelphia.  
 Hollinger, Israel, .....Goodville, .....Lancaster county.  
 Hollopeter, Arthur S., ...1848 Frankford ave., .....Philadelphia.  
 Hollopeter, Daniel F., ...Shickshinny, .....Luzerne county.  
 Hollopeter, S. G. M., ....Shenandoah, .....Schuylkill county.  
 Holloway, Martin L., ....730 N. 16th, .....Philadelphia.  
 Hollowell, Chas. W., ....1308 S. 16th, .....Philadelphia.  
 Hollowell, James A., ....4316 Pine street, .....Philadelphia.  
 Holmes, Geo. Y., .....Claysville, .....Washington county.  
 Holmes, Wm. H., .....216 W. 4th street, .....Williamsport.  
 Holt, Edwin M., .....1015 Cherry, .....Philadelphia.  
 Holt, James S., .....453 Richmond, .....Philadelphia.  
 Holt, Joseph C., .....Pottsville, .....Schuylkill county.  
 Holt, Wm. P., .....Frackville, .....Schuylkill county.  
 Holthouse, Albert W., ....105 Sheffield street, .....Allegheny.  
 Holthausser, Geo. J., ...5th & Fairmount ave., ...Philadelphia.

Holtzhausser, Ludwig, ...3201 Powelton ave., .....Philadelphia.  
 Hood, John F., .....109 S. Main, .....Washington.  
 Hooper, Oliver P., .....Upland, .....Delaware county.  
 Hoopes, W. Homer, .....Newport, .....Perry county.  
 Hoover, Albert M., .....Parker City, .....Armstrong county.  
 Hoover, Henry T., .....521 Wolf street, .....Philadelphia.  
 Hopkins, John A., .....Perryopolis, .....Fayette county.  
 Hormell, C. N., .....Charleroi, .....Washington county.  
 Horn, Chas. W., .....Slatington, .....Lehigh county.  
 Horn, David, Jr., .....Harrisburg, .....Dauphin county.  
 Horn, Edgar A., .....2431 Douglas street, .....Philadelphia.  
 Horn, Harry M., .....Washington, .....Washington county.  
 Horn, H. Y., .....Coplay, .....Lehigh county.  
 Horn, Wilbur F., .....28 N. Main, .....Carlisle.  
 Hornberger, Harry O., ...Hazlewood street, .....Pittsburgh.  
 Hornby, Walter M., .....6148 Ridge ave., .....Roxborough.  
 Horner, James W., .....1106 Chestnut, .....Philadelphia.  
 Horning, John, .....24 S. Main, .....Bethlehem.  
 Hornstrom, Wm., .....737 5th street, .....Warren.  
 Horting, Geo. W., .....1000 S. 2d, .....Philadelphia.  
 Hosack, Mrs. Mary J., ..Jackson Centre, .....Mercer county.  
 Hossler, David A., .....Pittsburgh, .....Allegheny county.  
 Hotchkiss, Sidney B., ....Edinboro, .....Erie county.  
 Houck, Paul W., .....Shenandoah, .....Schuylkill county.  
 Hough, John W., .....513 N. 41st, .....Philadelphia.  
 Houghton, J. C., .....Lancaster, .....Lancaster county.  
 Housekeeper, A. K., .....840 N. 19th, .....Philadelphia.  
 Howard, Carrie E., .....1601 Christian, .....Philadelphia.  
 Howard, Horace E., .....Camden, N. J., .....  
 Howard, John E., .....1411 Market, .....Harrisburg.  
 Howard, J. Griffith, .....Broad & Fairmount ave., Philadelphia.  
 Howd, Fay F., .....Wellsboro, .....Tioga.  
 Howell, Harry F., .....1421 Arch, .....Philadelphia.  
 Howells, John J., .....Luzerne, .....Luzerne county.  
 Huber, Chas. F., .....6130 Penn ave., .....Pittsburgh.  
 Huber, James H., .....Gettysburg, .....Adams county.  
 Huber, Solomon R., .....Chambersburg, .....Franklin county.  
 Huber, Wm., .....Atlantic City, .....New Jersey.  
 Hubley, Alfred A., .....30 W. King street, .....Lancaster.  
 Hubley, John H., .....16th & Race, .....Philadelphia.  
 Hudson, A. G., .....Safe Harbor, .....Lancaster county.  
 Hudson, Frank E. E., ....Pottstown, .....Montgomery county.  
 Huebner, Geo. W., .....642 Main street, .....Johnstown.  
 Hugg, Willis P., .....Sayre, .....Bradford county.  
 Hughes, Frank S., .....1537 N. 15th, .....Philadelphia.  
 Hughes, Harry W., .....Millville, .....New Jersey.  
 Hughes, Isaac N., .....Canonsburg, .....Washington county.  
 Hughes, L. B., .....5100 Penn ave., .....Pittsburgh.  
 Hughes, Wm., .....1733 Beaver ave., .....Allegheny.  
 Hugus, Richard T., .....610 Clays ave., .....Jeannette.  
 Hukill, Oscar K., .....11th & Pine, .....Philadelphia.  
 Hulbert, Wm. H., .....Sheakleyville, .....Mercer county.  
 Hull, Chas. S., .....4th ave., & Smithfield st., Pittsburgh.

Hull, Geo. W., .....23 W. King street, .....Lancaster.  
 Hull, Morris A., .....Manayunk, .....Philadelphia.  
 Hulshizer, Martin, .....Doylestown, .....Bucks county.  
 Humes, Robert D., .....West Newton, .....Westmoreland county.  
 Humma, Henry J., .....100 N. 10th, .....Reading.  
 Hummel, David Fox, ....1400 Hanover, .....Philadelphia.  
 Humphrey, David W., ..Scranton, .....Lackawanna county.  
 Humphreys, Robert E., ..Irwin, .....Westmoreland county.  
 Hummell, Bird S., .....New Kensington, .....  
 Hunt, Geo. E., .....Fairview, .....Erie county.  
 Hunt, G. Shoop, .....Danville, .....Montour county.  
 Hunter, James E., .....Turtle Creek, .....Allegheny county.  
 Hunter, Samuel W., .....1516 North street, .....Philadelphia.  
 Hunter, Thos., .....15th & Wharton, .....Philadelphia.  
 Hunter, W. A., .....Mt. Union, .....Huntingdon county.  
 Huntington, Henry N., ..Sewickley, .....Allegheny.  
 Huntington, Joseph, .....3312 Woodland ave., .....Philadelphia.  
 Huntsman, Howard D., ..820 N. 21st, .....Philadelphia.  
 Hurd, Michael E., .....La Jose, .....Clearfield county  
 Hurley, D. G., .....1332 11th ave., .....Altoona.  
 Huston, Frank, .....Uniontown, .....Fayette county.  
 Huston, James, .....1755 N. 13th, .....Philadelphia.  
 Huston, James L., .....901 Ferry, .....Easton.  
 Hutchings, Otway E., ....Glen Riddle, .....Delaware county.  
 Hutchison, B. T., .....Stroudsburg, .....Monroe county.  
 Hutchison, David W., ....E. Downingtown, .....Chester county.  
 Hutton, David S., .....Smithton, .....  
 Hutton, James C., .....New Castle, .....Lawrence county.  
 Huzzard, Kurtz, .....837 De Kalb, .....Norristown.  
 Hyatt, Edwin, .....Johnsonburg, .....Elk county.  
 Hyde, Alfred C., .....Mahonington, .....Lawrence county.  
 Hyde, Chas. W., .....Sharon, .....Mercer county.  
 Hyde, James M., .....5508 Hays street, .....Pittsburgh.  
 Hyde, John W., Jr., .....5713 Rural ave., .....Pittsburgh.  
 Hyde, Wm. W., .....West Middlesex, .....Mercer county.  
 Hyer, Eugene E., .....Wellsboro, .....Tioga county.  
 Iaeger, Samuel T., .....Reading, .....Berks county.  
 Ibrig, Theo. E., .....3614 5th ave., .....Pittsburgh.  
 Infield, Thos. H., .....Sandy Lake, .....Mercer county.  
 Ingram, Geo. T., .....Wyalusing, .....Bradford county.  
 Ingram, Theo. E., .....Marietta, .....Lancaster county.  
 Ink, Chas. Thomas, .....303 8th ave., .....Homestead.  
 Ink, Lemuel W., .....7103 Penn ave., .....Pittsburgh.  
 Innes, Wilson J., .....31 McClure ave., .....Allegheny.  
 Ireland, Wm. P., .....Mt. Holly, N. J., .....New Jersey.  
 Irvin, Robert H., .....St. Clair, .....Schuylkill county.  
 Irvine, Reed, .....Bedford, .....Bedford county.  
 Irving, Robert C., .....Ogdensburg, .....Tioga county.  
 Irwin, John F., .....Clearfield, .....Clearfield county.  
 Irwin, Joseph R., .....Curwensville, .....Clearfield county.  
 Irwin, Wm. H., .....11th ave. & 16th st., .....Altoona.  
 Isard, Geo. W., .....3629 Haverford ave., .....Philadelphia.  
 Ischler, Geo. H., .....Marshall & York, .....Philadelphia.

Isenberg, Chas., .....7th & Thompson, .....Philadelphia.  
 Jackel, John O., .....1340 S. 7th, .....Philadelphia.  
 Jackson, A. C., .....2002 Sassafra, .....Erie.  
 Jackson, Andrew, .....1500 N. 5th, .....Harrisburg.  
 Jackson, Chas. H., .....Salem, .....New Jersey.  
 Jackson, Geo. H., .....7th & Arch, .....Philadelphia.  
 Jackson, J. Benson, .....New Buffalo, .....Perry county.  
 Jackson, John W., .....Arnot, .....Tioga county.  
 Jackson, Robert M., .....21st & Locust, .....Philadelphia.  
 Jackson, S. H., Jr., .....823 Wood street, .....Wilkinsburg.  
 Jackson, Thos., .....2024 E. Clearfield, .....Philadelphia.  
 Jackson, Wm. H., .....New Buffalo, .....Perry county.  
 Jacob, Chas. P., .....1106 Chestnut, .....Philadelphia.  
 Jacob, Walter W., .....8th & Arch, .....Philadelphia.  
 Jacobs, Irwin B., .....Butler, .....Butler county.  
 Jacobs, John P., .....Hollidaysburg, .....Blair county.  
 Jacobs, Theodore, .....363 E. Main, .....Norristown.  
 Jacobs, Thos. J., .....Somerfield, .....Somerset county.  
 Jacobson, Frank E., .....1334 N. 52d, .....Philadelphia.  
 Jacoby, Chas. N., .....686 Preble ave., .....Allegheny.  
 Jacoby, Cyrus, .....4th & New, .....So. Bethlehem.  
 Jadwin, C. C., .....Honesdale, .....Wayne county.  
 Jadwin, Henry B., .....Carbondale, .....Lackawanna county.  
 Jaeger, Ernest C., .....2262 N. 7th, .....Philadelphia.  
 Jaeger, Wm. Chas., .....1204 Point Breeze ave., ..Philadelphia.  
 James, Arthur B., .....1616 Vine, .....Philadelphia.  
 James, Benj. F., .....Ebensburg, .....Cambria county.  
 James, Edmund, .....Ebensburg, .....Cambria county.  
 James, Geo. R., .....Orbisonia, .....Huntingdon county.  
 James, G. W. C., .....Orbisonia, .....Huntingdon county.  
 James, Henry H., .....Parsons, .....Luzerne county.  
 James, Joseph W., .....East Brady, .....  
 James, Robert R., .....123 S. Lincoln ave., .....Scranton.  
 Jameson, David, Jr., ....801 S. 3d, .....Philadelphia.  
 Jamison, John C., .....Wilkinsburg, .....Allegheny county.  
 Jamison, Samuel C., .....61 Fulton, .....Pittsburgh.  
 Janda, Thos. J., .....7 Main, .....Allegheny.  
 Jarrett, Guy L., .....16 E. 3d, .....Williamsport.  
 Javens, Thos. H., .....Rochester, .....Beaver county.  
 Jefferis, David S., .....883 N. 45th, .....Philadelphia.  
 Jenkins, E. P., .....Six Mile Run, .....Bedford county.  
 Jenkin, Harry S., .....215 S. Hyde Park ave., ..Scranton.  
 Jenkins, David S., .....800 Walnut street, .....Philadelphia.  
 Jenkins, Geo. W., .....101 S. Main ave., .....Scranton.  
 Jenkins, John L., .....1528 Jackson, .....Scranton.  
 Jenkins, Wm. H., .....Hughesville, .....  
 Jenks, Wm. E., .....Philadelphia, .....Philadelphia.  
 Jenks, Wm. J., .....4043 Market, .....Philadelphia.  
 Jessop, Chas. J., .....Kittanning, .....Armstrong county.  
 Jessop, Samuel A. S., ....Kittanning, .....Armstrong county.  
 Jewell, Thos. H., .....Pulaski, .....Lawrence county.  
 Joffe, Jacob L., .....631 Catharine, .....Philadelphia.  
 John, Frank J., .....Charleroi, .....Washington county.

John, Harry J., .....3705 5th ave., .....Pittsburgh.  
 Johns, Frank J., .....920 Green Ridge street, ..Philadelphia.  
 Johnson, Albert B., .....17th & Bainbridge, .....Philadelphia.  
 Johnson, Geo. H., .....917 N. Jessup street, .....Philadelphia.  
 Johnson, Hussey B., .....1107 3d ave., .....New Brighton.  
 Johnson, Olive C., .....Danville, .....Montour county.  
 Johnson, Samuel C., .....Blooming Valley, .....Crawford county.  
 Johnson, Wm. A., .....6th & Green, .....Philadelphia.  
 Johnson, Wm. D., .....Le Raysville, .....Bradford county.  
 Johnson, Wm. M., .....Venetia, .....Washington county.  
 Johnston, A. R., .....New Bloomfield, .....Perry county.  
 Johnston, Edward J., ....2552 Penn ave., .....Pittsburgh.  
 Johnston, Frank E., .....Moore, .....Delaware county.  
 Jones, Chas. F., .....Stevensville, .....Bradford county.  
 Jones, Chas. P., .....1557 Dickson street, ....Scranton.  
 Jones, C. Lyston, .....Chestnut Hill, .....Philadelphia.  
 Jones, Daniel G., .....Olyphant, .....Lackawanna county.  
 Jones, David M., .....512 S. Main ave., .....Scranton.  
 Jones, Frederick H., .....113 Davis Place, .....Wilkes-Barre,  
 Jones, Frederick R., .....Mt. Jewett, .....McKean county.  
 Jones, Geo. D., .....1601 S. 5th, .....Philadelphia.  
 Jones, Harry E., .....3200 Diamond, .....Philadelphia.  
 Jones, James M., .....700 N. 10th, .....Reading.  
 Jones, John H., .....1430 5th ave., .....Pittsburgh.  
 Jones, John R., .....Jermyn, .....Lackawanna county.  
 Jones, Joseph H., .....Scranton, .....Lackawanna county.  
 Jones, Lester D., .....854 N. 10th, .....Philadelphia.  
 Jones, Nathan, .....430 5th ave., .....Pittsburgh.  
 Jones, P. Lawrence, .....Hazlewood & 2d ave., ...Pittsburgh.  
 Jones, Robert P., .....Belle Vernon, .....Fayette county.  
 Jones, Thos. Howell, .....1144 Academy street, ....Scranton.  
 Jones, Wm. B., .....1336 S 8th, .....Philadelphia.  
 Jones, Wm. H., .....2432 N. 15th, .....Philadelphia.  
 Jones, Wm. R., .....1101 Diamond, .....Philadelphia.  
 Jones, Wm. W., .....212 Pine, .....Williamsport.  
 Jorden, A. S., .....Mt. Carmel, .....Northumberland county.  
 Jordon, Frank W., .....Tacony, .....Philadelphia.  
 Jordon, Frank W., .....Bedford, .....Bedford county.  
 Joslin, Henry H., .....Ulster, .....Bradford county.  
 Judd, Albert F., .....Homestead, .....Allegheny county.  
 Judd, James F., .....1801 Orthodox street, ....Frankford.  
 Judge, John A., .....6th & Race, .....Philadelphia.  
 Jump, Harvey D., .....Sayre, .....Bradford county.  
 Jungmann, Emil, .....4th & Noble, .....Philadelphia.  
 Kachline, Paul H., .....Nazareth, .....Northampton county.  
 Kaempfer, Emil F., .....Moyamen. av, & Dickin'n, Philadelphia.  
 Kaercher, Albert J., .....62 Federal street, .....Allegheny.  
 Kahl, Chas. W., .....236 5th ave., .....McKeesport.  
 Kahle, D. B., .....New Kensington, .....Westmoreland county.  
 Kahnweiler, Levi, .....447 N. 4th, .....Philadelphia.  
 Kalbach, Chas. P., .....Bernville, .....Berks county.  
 Kalbach, Harry A., .....509 N. 17th, .....Philadelphia.  
 Kalkman, Henry A., .....1039 N. 3d, .....Philadelphia.



Kalmbach, Henry G., ....Mervine & Norris, .....Philadelphia.  
 Kamerer, Geo. F., .....Greenville, .....Mercer county.  
 Kane, Frank A., .....Minooka, .....  
 Kane, James F., .....22 S. Main, .....Pittston.  
 Kane, John S., .....Fredonia, .....Mercer county.  
 Kantner, Harry B., .....1308 S. 11th street, .....Altoona.  
 Kantz, T. Clayton, .....Selins Grove, .....Snyder county.  
 Karcher, James D., .....Chestnut Hill, .....Philadelphia.  
 Karsner, Chas. W., .....1320 S. Broad, .....  
 Kasson, Myron, .....Scranton, .....Lackawanna county.  
 Kasten, W. J., .....Boiling Springs, .....Cumberland county.  
 Katzenmeyer, Henry A.,...64 Chestnut, .....Allegheny county.  
 Kauffman, John R., .....504 W. Chestnut, .....Lancaster.  
 Kauffman, Walter L., ....Lancaster, .....Lancaster county.  
 Kauffman, Chas., .....Danville, .....Montour county.  
 Kaufman, Reuben M., ...Seaford, .....Delaware county.  
 Kaye, John, .....26th & Brown, .....Philadelphia.  
 Kealy, John J., .....117 Mulberry street, ....Scranton.  
 Keck, Frank P., .....Laury Station, .....Lehigh county.  
 Keck, Harry E., .....Kecksburg, .....Westmoreland county.  
 Keck, J. M., .....Kecksburg, .....Westmoreland county.  
 Keck, Wm. Geo., .....Kecksburg, .....Westmoreland county.  
 Keck, W. H., .....5147 Penn ave., .....Pittsburgh.  
 Keefer, Chas. D., .....Chambersburg, .....Franklin county.  
 Keefer, Edgar C., .....Shippensburg, .....Cumberland county.  
 Keeler, Chas. E., .....40th & Locust, .....Philadelphia.  
 Keeler, Joseph P., .....1250 Wharton street, ....Philadelphia.  
 Keen, Geo. C., .....20th & Spruce, .....Philadelphia.  
 Keen, Geo. S. J., .....Wiconisco, .....Dauphin county.  
 Keenan, John J., .....1640 Ritner, .....Philadelphia.  
 Keeney, Caleb R., .....1601 Arch, .....Philadelphia.  
 Keeney, Wm. R., .....1601 Arch, .....Philadelphia.  
 Keet, Frank S., .....433 Market, .....Harrisburg.  
 Keil, John J., .....Etna, .....Allegheny county.  
 Keim, Asher D., .....16th & Tasker, .....Philadelphia.  
 Keim, Joseph P., .....Bristol, .....Bucks county.  
 Kelper, Harvey L., .....145 N. 7th, .....Allentown.  
 Kelchner, Chas. E., .....20th & Columbia ave., ...Philadelphia.  
 Kellenberger, Fred. J., ..108 Fulton street, .....Pittsburgh.  
 Keller, Alexander G., ....161 N. 2d, .....Philadelphia.  
 Keller, Christian K., ....405 Market, .....Harrisburg.  
 Keller, Croll, .....405 Market, .....Harrisburg.  
 Keller, Frederick R., ....1812 S. 4th, .....Philadelphia.  
 Keller, John W., .....Ashley, .....Luzerne county.  
 Keller, Wm., .....Munson Station, .....Clearfield county.  
 Kelley, Chas. M., .....1317 Forbes, .....Pittsburgh.  
 Kelley, John J., .....31st & Cumberland, .....Philadelphia.  
 Kellner, Henry C. F., ....1337 E. Montgomery ave., Philadelphia.  
 Kelly, Bernard A., .....Carbondale, .....Lackawanna county.  
 Kelly, Cassius H., .....Wash. ave. & Fremont, ..Allegheny.  
 Kelly, Edward E., .....Butler, .....Butler county.  
 Kelly, Francis B., .....So. Oil City, .....Venango county.  
 Kelly, Francis P., .....368 Scott, .....Wilkes-Barre.

Kelly, Harry E., .....Parkers Landing, .....Armstrong county.  
 Kelly, James H., .....Middle Lancaster, .....  
 Kelly, Joseph H., .....Carbondale, .....Lackawanna county.  
 Kelly, Leonard, .....Olyphant, .....Lackawanna county.  
 Kelly, Olive L., .....Olyphant, .....Lackawanna county.  
 Kelly, Patrick M., .....20th & Federal, .....Philadelphia.  
 Kelly, Robert J., .....112 Market, .....Philadelphia.  
 Kelly, Russel E., .....Sunbury, .....Northumberland county.  
 Kelly, Wm. Clarence, ....1804 N. 3d street, .....Chester.  
 Kemble, Chas., .....Tidioute, .....Warren county.  
 Kemble, Grant W., .....Titusville, .....Crawford county.  
 Kemble, Wm. W., .....Tidioute, .....Warren county.  
 Kemmerer, N. H., .....Emaus, .....Lehigh county.  
 Kemp, Lucien S., .....500 S. 9th, .....Philadelphia.  
 Kempsmith, Paul, .....Bethlehem, .....Northampton county.  
 Kenah, Chas. J., .....New Brighton, .....Beaver county.  
 Kenah, Roland L., .....New Brighton, .....Beaver county.  
 Kendall, Eugene E., .....Waterford, .....Erie county.  
 Kendall, Perry G., .....Port Allegheny, .....McKean county.  
 Kendig, Allen J., .....16th & Brown, .....Philadelphia.  
 Kendig, Isaiah H., .....333 N. 2d, .....Philadelphia.  
 Kennard, John B., .....Clearfield, .....Clearfield county.  
 Kennedy, Alexander, .....1037 Girard ave., .....Philadelphia.  
 Kennedy, Edwin R., .....241 S. 10th, .....Philadelphia.  
 Kennedy, Geo. W., .....Pottsville, .....Schuylkill county.  
 Kennedy, Newton, .....1017 Lamont, .....Allegheny.  
 Kennedy, Wm., .....1236 S. 15th, .....Philadelphia.  
 Kennedy, Wm. H., .....30 S. 3d, .....Harrisburg.  
 Kennedy, Wm. P., .....Priceburg, .....  
 Kenworthy, John, .....Coatesville, .....Chester county.  
 Kepler, Daniel C., .....Paxtonville, .....  
 Kepner, John C., .....Chester, .....Delaware county.  
 Kepner, Weldon S., .....224 Market, .....Philadelphia.  
 Kercher, Edwin H., .....1301 Columbia ave., .....Philadelphia.  
 Kern, Franklin, .....3875 Aspen, .....Philadelphia.  
 Kern, James P., .....2204 N. 18th, .....Philadelphia.  
 Kern, Palmer M., .....Bath, .....Northampton county.  
 Kerr, James, Jr., .....Centre & Highland ave's, Pittsburgh.  
 Kerr, John W., .....Rimersburg, .....Clarion county.  
 Kerr, Joseph M., .....Stroudsburg, .....Monroe county.  
 Kerr, Milton C., .....Blairsville, .....Indiana county.  
 Kerr, Perry L., .....Mars, .....Butler county.  
 Kerr, Wm. D., .....1635 Alden street, .....Philadelphia.  
 Kervey, Harry R., .....West Chester, .....Chester county.  
 Kessler, Edward F., .....2400 Spring Garden, .....Philadelphia.  
 Kessler, Lawrence A., ....2400 Spring Garden, .....Philadelphia.  
 Kester, Elias P., .....New Albany, .....  
 Ketring, David F., .....Williamsburg, .....Blair county.  
 Kiefer, Wm. Fredk., .....29th & Diamond, .....Philadelphia.  
 Kieffer, Chas. C., .....60 E. Main, .....Carlisle.  
 Kieffer, Otto D., .....309 Dugan, .....Philadelphia.  
 Kier, Harry M., .....2907 Carson, .....Pittsburgh.  
 Kille, Geo. H., .....1759 N. 10th, .....Philadelphia.

Kilgore, Edgar B., .....Franklin, .....Venango county.  
 Kilgus, Harry E., .....Renovo, .....Clinton county.  
 Kilgus, John F., .....813 Maple Place, .....Williamsport.  
 Kilgus, Wm. M., .....Renovo, .....Clinton county.  
 Killian, Chas. T., .....14 Centre street, .....Easton.  
 Killough, Samuel M., ....Hummelstown, .....Dauphin county.  
 Kimberlin, Fredk. W., ..806 Smith, .....Norristown.  
 Kincaid, Raymond K., ..2328 E. Norris, .....Philadelphia.  
 King, Albert J., .....Ardmore, .....Montgomery county.  
 King, Chas. E., .....2401 Master, .....Philadelphia.  
 King, Everett L., .....Philadelphia, .....Philadelphia.  
 King, James C., .....Reynoldsville, .....Jefferson county.  
 King, James D., .....Easton, .....Northampton county.  
 King, Lloyd S., .....711 N. 6th, .....Philadelphia.  
 Kinnear, Wm. A., .....Warren, .....Warren county.  
 Kinsel, Grant A., .....91 Buena Vista, .....Allegheny.  
 Kintzer, Harry A., .....522 N. 6th, .....Philadelphia.  
 Kirby, Chas. P., .....33d & Chestnut, .....Philadelphia.  
 Kirby, Clarence T., .....Towanda, .....Crawford county.  
 Kirby, Frank B., .....4105 Ogden, .....Philadelphia.  
 Kirk, John H., .....510 W. 7th, .....Chester.  
 Kirk, Lewis R., Jr., ....Malvern, .....Delaware county.  
 Kirk, Samuel B., .....1400 Spruce, .....Philadelphia.  
 Kirk, Wm. P., .....4730 Liberty ave., .....Pittsburgh.  
 Kirkendall, C. F., .....Johnstown, .....Cambria county.  
 Kirlin, Chas. C. H., .....Shenandoah, .....Schuylkill county.  
 Kirlin, P. P. D., .....Shenandoah, .....Schuylkill county.  
 Kishadden, Wm. J., .....Etna, .....Allegheny county.  
 Kisner, Chas. N., .....Berwick, .....Columbia county.  
 Kitzmiller, Frank K., ....1331 Derry street, .....Harrisburg.  
 Kleckner, James, .....Lewisburg, .....Union county.  
 Kleim, C. A., .....Bloomsburg, .....Columbia county.  
 Kleim, H. F., .....5 S. Mead street, .....Wilkes-Barre.  
 Kleinert, Geo. J., .....3316 Mantua ave., .....Philadelphia.  
 Kline, Alvin B., .....12th & Carson, .....Pittsburgh.  
 Kline, Frank, .....245 N. 12th, .....Philadelphia.  
 Kline, Harry H., .....600 Centre ave., .....Reading.  
 Kline, Harry J., .....145 N. 10th, .....Philadelphia.  
 Kline, John, .....Ashley, .....Luzerne county.  
 Kline, John H., .....Hanover, .....York county.  
 Kline, U. S., .....401 W. 18th, .....Erie.  
 Kline, W. C., .....Myerstown, .....Lebanon county.  
 Kline, Wm. O., .....Rice's Landing, .....Green county.  
 Klinefelter, Chas., .....139 Franklin ave., .....Scranton.  
 Klinestuber, Wm. Geo., ..2683 Frankford ave., ....Philadelphia.  
 Klingensmith, J. P., ....Blairsville, .....Indiana county.  
 Klingler, John H., .....1500 Brown, .....Philadelphia.  
 Klingler, Peter, .....Kratzerville, .....Snyder county.  
 Klonoski, W. S., .....1305 Pittston ave., .....Scranton.  
 Klapp, Wm. H., .....Lock Haven, .....Clinton county.  
 Klopp, Eli L., .....Oak Lane, .....Philadelphia.  
 Klopp, Henry L., .....1444 N. 19th, .....Philadelphia.  
 Klopp, Lewis C., .....2963 N. 6th, .....Philadelphia.

Klopp, Peter P., .....6th & Indiana ave., .....Philadelphia.  
Klopfenstein, J. A., .....711 State, .....Erie.  
Klusmeyer, Henry C., ....1155 S. 8th, .....Philadelphia.  
Knapp, Philip P., .....Sewickley, .....Allegheny county.  
Knauer, August H., .....215 Lawrence, .....Philadelphia.  
Kneeshaw, Wm. W., .....Wissahickon, .....Philadelphia.  
Knepp, Andrew S., .....North East, .....Erie county.  
Knerr, L. J., .....1419 Arch, .....Philadelphia.  
Knight, Ambrose S., .....North Clarendon, .....Warren county.  
Knight, Elmer E., .....Carnegie, .....Allegheny county.  
Knisell, Sidney L., .....Philadelphia, .....Philadelphia.  
Knode, John C., .....Greenfield ave., .....Pittsburgh.  
Knoppel, Wm. H., .....1017 N. Irving ave., .....Scranton.  
Knorr, Victor C., .....Braddock, .....Allegheny county.  
Knouse, Jacob H., .....426 Market, .....Harrisburg.  
Knowles, Geo. A., .....4812 Baltimore ave., .....Philadelphia.  
Koch, Chas. H., .....44th & Lancaster ave., ...Philadelphia.  
Koch, Christopher, Jr., ..1534 S. 5th, .....Philadelphia.  
Koch, Eugene C. H., ....329 N. 4th, .....Philadelphia.  
Koch, Harry W., .....5705 Germantown ave., ..Philadelphia.  
Koch, Julius A., .....Bluff & Pride, .....Pittsburgh.  
Koch, Louis, .....329 N. 4th, .....Philadelphia.  
Kocher, David G., .....1021 Girard ave., .....Philadelphia.  
Koempel, Chas., .....501 Linden, .....Scranton.  
Koenig, Albert, .....807 N. 3d, .....Philadelphia.  
Koenig, Wm. M., .....Reading, .....Berks county.  
Kohler, Chas., .....831 N. 26th, .....Philadelphia.  
Kolb, Chas. A., .....528 Wood, .....Pittsburgh.  
Kolb, Isadore, .....Berwyn, .....  
Kolp, Jacob L., .....1000 Buttonwood, .....Philadelphia.  
Kooker, Geo. W., .....200 Rittenhouse street, ..Germantown.  
Kooker, Jacob G., .....Norristown, .....Montgomery county.  
Kooker, John L., .....13th & Diamond, .....Philadelphia.  
Koons, Milton H., .....Catasauqua, .....Lehigh county.  
Koons, Wm. H., .....Clarks Summit, .....Lackawanna county.  
Kornacher, Wm., .....724 Pittston ave., .....Scranton.  
Kottcamp, A. F., .....1711 Summer, .....Philadelphia.  
Kottka, Ray W., .....437 Green, .....Philadelphia.  
Kreling, A. H., .....108 River ave., .....Pittsburgh.  
Krall, Geo. H., .....Newville, .....Cumberland county.  
Kramer, Chas. F., .....3d & Broad, .....Harrisburg.  
Kramer, Homer D., .....1223 Granview ave., ....Pittsburgh.  
Kramer, Ira D. W., .....Richmond & Palmer, ...Philadelphia.  
Kramer, Jere R., .....627 Park ave., .....Williamsport.  
Kramer, Matthew, .....309 S. 9th, .....Scranton.  
Kratz, Annetta, .....Plumsteadville, .....Bucks county.  
Kratz, Mahlon, .....5100 Germantown ave., ..Philadelphia.  
Kraus, Otto, .....28th & Poplar, .....Philadelphia.  
Krause, John H., .....2d & Green, .....Philadelphia.  
Krauser, Daniel M., .....Milton, .....Northumberland county.  
Krauser, Ellis, .....Milton, .....Northumberland county.  
Krauskoff, Geo. H., .....7009 Hermitage, .....Pittsburgh.  
Krebs, A. Bryan, .....Lilly, .....Indiana county.

Krebs, Harry J., ..... Mahanoy City, ..... Schuylkill county.  
 Krebs, Jacob S., ..... Herndon, ..... Northumberland county.  
 Kreckler, Wm. H., ..... 5th & Mifflin, ..... Philadelphia.  
 Kredel, Geo., ..... Johnstown, ..... Cambria county.  
 Kredel, Wm. Henry, ..... 114 Clinton street, ..... Johnstown.  
 Krehan, Frank, ..... Marshalsea, ..... Allegheny county.  
 Krehl, Benj., ..... Howard & Thompson, ... Philadelphia.  
 Kreis, Arnold C., ..... McKeesport, ..... Allegheny county.  
 Kreitzer, Michael C., ..... 1536 N. 4th, ..... Philadelphia.  
 Kremer, Walter H., ..... 6010 Germantown ave., .. Philadelphia.  
 Kressler, Geo. D., ..... Bethlehem, ..... Northampton county.  
 Kretz, Edward J. W., .... 359 Webster ave., ..... Pittsburgh.  
 Krewson, Wm. E., ..... 1836 Franklin, ..... Philadelphia.  
 Krewson, Wm. E., Jr., ... 1836 Franklin, ..... Philadelphia.  
 Krey, Louis A., ..... 286 Ohio, ..... Allegheny.  
 Krider, James D., ..... 1709 N. Sydenham, ..... Philadelphia.  
 Krieder, Frank L., ..... 921 Green, ..... Reading.  
 Krieger, Geo. L., ..... Arnold, ..... Westmoreland county.  
 Kroh, Harry K., ..... Philadelphia, ..... Philadelphia.  
 Krum, Thos. E., ..... 223 N. 6th, ..... Reading.  
 Krumrine, Sidney, ..... Bellefonte, ..... Centre county.  
 Kuehn, Gustav A. A., ... 371 Scott, ..... Wilkes-Barre.  
 Kuhn, Arthur J., ..... Homestead, ..... Allegheny county.  
 Kuhn, Chas. L., ..... Mt. Pleasant, ..... Westmoreland county.  
 Kuhn, Gustav O., ..... 1249 N. 15th, ..... Philadelphia.  
 Kuhn, Milton S., ..... Mt. Pleasant, ..... Westmoreland county.  
 Kuhn, Paul, ..... 501 2d ave., ..... Pittsburgh.  
 Kuhns, Edward J., ..... Lansdale, .....  
 Kulp, Wm. A., ..... Philipsburg, ..... Centre county.  
 Kunkel, Timothy O., .... Peale, ..... Clearfield county.  
 Kunkel, Wm. E., ..... Newberry, ..... Lycoming county.  
 Kunkel, W. G., ..... 125 N. 10th, ..... Philadelphia.  
 Kunkel, Wm. H., ..... 508 Arch, ..... Newberry.  
 Kuntz, John R., ..... Washington, ..... Washington county.  
 Kutscher, Geo. W., ..... Braddock, ..... Allegheny county.  
 Kyle, Elmer B., ..... 2909 Kensington ave., ... Philadelphia.  
 Kyser, Geo. Herbert, .... 6th & Vine, ..... Philadelphia.  
 Lacey, Wm. H., ..... 1900 Green, ..... Philadelphia.  
 La Chat, Harvey W., .... 7206 Woodland ave., .... Philadelphia.  
 Lacian, Joseph, ..... Mauch Chunk, ..... Carbon county.  
 Lackenmayer, Henry J., ... 3153 N. 22d, ..... Philadelphia.  
 Lackey, Richard H., .... 500 W. Lehigh ave., ..... Philadelphia.  
 La Dow, Addington, .... 8th & Oak Lane, ..... Philadelphia.  
 Laessle, Henry A., ..... 31st & Berks, ..... Philadelphia.  
 Lafean, Albert H., ..... York, ..... York county.  
 Lafean, Edward C., ..... York, ..... York county.  
 Laferty, Jacob E., ..... Gilberton, ..... Schuylkill county.  
 Lafferty, Archie J., .... Somerset & Reese, .... Philadelphia.  
 Lafferty, Chas. D., ..... 1735 N. 18th, ..... Philadelphia.  
 Lafferty, J. H., ..... New Florence, ..... Westmoreland county.  
 Lafferty, John H., ..... Sharon, ..... Mercer county.  
 Lake, Erastus E., ..... Shamokin, ..... Northumberland county.  
 Lalley, Peter F., ..... Rendham, ..... Lackawanna county.

Lamb, D. Hadley, .....Galeton, .....Potter county.  
Lambert, Geo. T., .....1201 N. 44th, .....Philadelphia.  
Lammer, Francis J., .....1704 W. Dauphin, .....Philadelphia.  
Landauer, Oscar, .....601 S. 9th, .....Philadelphia.  
Lancaster, B. S., .....Towanda, .....Bradford county.  
Lancaster, Robert D., ....Forksville, .....Sullivan county.  
Landis, Chas. P., .....3173 Kensington ave., ....Philadelphia.  
Landis, Frank T., .....Womelsdorf, .....Berks county.  
Landis, Geo. S., .....405 Market, .....Harrisburg.  
Landis, Isaac R., .....3522 Germantown ave., ...Philadelphia.  
Landis, Josiah, .....Manheim, .....Lancaster county.  
Landis, J. Wm., .....35 Poplar street, .....Philadelphia.  
Lane, Chas. E., .....43 N. 58th, .....Philadelphia.  
Lane, Homer K., .....Ulysses, .....Potter county.  
Lang, Carl A., .....2561 W. Sergeant, .....Philadelphia.  
Lang, Geo. P., .....810 Madison ave., .....Allegheny.  
Lange, Henry, .....Belle Vernon, .....Fayette county.  
Lange, Kennedy F., .....3705 Butler street, .....Pittsburgh.  
Lange, W. H., .....Belle Vernon, .....Fayette county.  
Langham, John W., .....996 N. 7th, .....Philadelphia.  
Langner, Paul H., .....533 Cedar, .....Reading.  
Lantz, Wm. H., .....2d & Cumberland, .....Philadelphia.  
Larry, Samuel, .....Arch & Jackson, .....Allegheny.  
Larue, Willis L., .....4099 Lancaster ave., .....Philadelphia.  
Lacheld, Peter W., .....13th & Sarah, .....Pittsburgh.  
Laschelle, Chas. L., .....Rockdale, .....Delaware county.  
Latchford, Orwan L., ....4th & Berks, .....Philadelphia.  
Lathrop, Walter, .....Hazleton, .....Luzerne county.  
Lau, Scott W., .....1200 Locust, .....Philadelphia.  
Laubach, Stephen, .....Easton, .....Northampton county.  
Laubach, Wm. H., Jr., ..Broad & Girard ave., ....Philadelphia.  
Laucks, Wm. J., .....116 Horter, .....Germantown.  
Lauer, J. Paul, .....40th & Locust, .....Philadelphia.  
Laughlin, James E., .....Norwood, .....Delaware county.  
Laurent, Augustus G., ..736 S. 3d street, .....Philadelphia.  
Lautenbacher, Irvin L., ..Williamstown, .....Dauphin county.  
Lautenbacher, Wm. R., ..Tamaqua, .....Suchylkill county.  
Lavery, Chas. K., .....Duncannon, .....Perry county.  
Lavery, Eugene C., .....Middletown, .....Dauphin county.  
Lavery, Theo. C., .....Middletown, .....Dauphin county.  
Law, Wm., .....Avoca, .....Luzerne county.  
Lawall, Chas. E., .....Catasauqua, .....Lehigh county.  
Lawall, Edgar J., .....Catasauqua, .....Lehigh county.  
Lawall, Walter S., .....437 Northampton street,..Easton.  
Lawrence, Henry R., .....15th & Locust, .....Philadelphia.  
Lawrence, Samuel C., ....Scottdale, .....Westmoreland county.  
Lawrence, Wm. E., .....Beaver, .....Beaver county.  
Lawson, Geo. S., .....613 N. 4th, .....Philadelphia.  
Lawton, Henry C., .....1410 Chestnut, .....Philadelphia.  
Lebar, Anizi, .....Stroudsburg, .....Monroe county.  
Leber, Jacob G., .....York, .....York county.  
Leberknoght, F. B., .....Newburgh, .....Cumberland county.  
Lee, Walter E., .....1000 S. 2d, .....Philadelphia.

Lee, Wm. E., .....2327 Brown, .....Philadelphia.  
 Leech, David M., .....1700 Wharton, .....Philadelphia.  
 Leedom, Chas., .....1403 Filbert, .....Philadelphia.  
 Leeser, Wm., .....Sunbury, .....Northumberland county.  
 Le Fevre, Actor A., .....250 S. Queen, .....Lancaster.  
 Legg, Geo. A., .....Honesdale, .....Wayne county.  
 Lehman, Fredk. C., .....25th & Columbia ave., ..Philadelphia.  
 Lehman, Joseph D., .....Manayunk, .....Philadelphia.  
 Lehr, J. Frank, .....916 N. 6th, .....Harrisburg.  
 Leidich, Percy G., .....Front & Vine, .....Harrisburg.  
 Leighty, Eli C., .....West Newton, .....Westmoreland county.  
 Leine, Arthur M., .....Honesdale, .....Wayne county.  
 Leitch, Chas. T., .....Quakertown, .....Bucks county.  
 Leitzell, Chas. B., .....Derry Station, .....Westmoreland county.  
 Leix, Louis, .....2320 Broad ave., .....Altoona.  
 Lemberger, Joseph L., ...Lebanon, .....Lebanon county.  
 Lenhart, Enos S., .....3144 Frankford ave., ....Philadelphia.  
 Leniger, Oscar M., .....133 Mill, .....Danville.  
 Leonard, Isaac E., .....White Haven, .....Luzerne county.  
 Leonard, John F., .....Bradford, .....McKean county.  
 Leonard, Robert P., .....Plymouth, .....Luzerne county.  
 Leshner, Edwin C., .....Chester, .....Delaware county.  
 Leshner, John B., .....Shoemakersville, .....Berks county.  
 Leslie, David A., .....New Kensington, .....Westmoreland county.  
 Leslie, James C., .....Parnassus, .....Westmoreland county.  
 Letzkus, Wm. G., .....Children's Hospital, .....Philadelphia.  
 Levan, Walter, .....Hazleton, .....Luzerne county.  
 Levering, Howard M., ....Manayunk, .....Philadelphia.  
 Levy, David W., .....1122 Palmer, .....Philadelphia.  
 Levy, Joseph J., .....1919 N. Mervine, .....Philadelphia.  
 Lewis, Daniel E., .....Edwardsdale, .....Luzerne county.  
 Lewis, Daniel W., .....1236 S. 8th, .....Philadelphia.  
 Lewis, Fisher A., .....2457 Kensington ave., ....Philadelphia.  
 Lewis, Frank C., .....59 W. Chestnut, .....Washington.  
 Lewis, Howard H., .....7943 Frankford ave., ....Philadelphia.  
 Lewis, John J., .....Mt. Carmel, .....Northumberland county.  
 Lewis, Llewellyn H., ....2504 Kensington ave., ....Philadelphia.  
 Lewis, Nathan N., .....Hazleton, .....Luzerne county.  
 Lewis, Thos., Jr., .....33 E. Centre, .....Mahanoy City.  
 Lewis, Thos. S., .....Oakmont, .....Allegheny county.  
 Lewis, Wm. H., .....Mt. Carmel, .....Northumberland county.  
 Lewis, Wm. T., .....42d & Westminster ave., ..Philadelphia.  
 Libhart, Anthony C., ....Marietta, .....Lancaster county.  
 Life, J. C., .....1123 Spruce, .....Philadelphia.  
 Light, James R., .....Lebanon, .....Lebanon county.  
 Liggett, Samuel J., .....936 W. Somerset, .....Philadelphia.  
 Lilly, Herbert Geo., .....900 Callowhill, .....Philadelphia.  
 Lincoln, Geo. Washington, 1610 Master, .....Philadelphia.  
 Lindig, Chas. Warren, ...2649 Germantown ave., ..Philadelphia.  
 Lindsey, Chris R., .....Mercer, .....Mercer county.  
 Lindsley, R. G., .....Corry, .....Erie county.  
 Lingle, Milton D., .....1064 N. 9th, .....Reading.  
 Lingle, Reuben D., .....1010 Chestnut, .....Reading.



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 Linn, Max C., .....5201 Butler, .....Pittsburgh.  
 Linn, Wm. E., .....1024 Arch street, .....Philadelphia.  
 Lippen, Harry, .....114 Ripka ave., .....Philadelphia.  
 Lippman, Max, .....1607 Ridge ave., .....Philadelphia.  
 Lisenring, Gibson H., ....7th & Parade, .....Erie.  
 List, Joshua M., .....Evans City, .....Butler county.  
 List, Walter R., .....4451 Frankford ave., .....Philadelphia.  
 Little, Geo., .....Tamaqua, .....Schuylkill county.  
 Livezey, John B., .....Doylestown, .....Bucks county.  
 Livezey, Richard W., ....Doylestown, .....Bucks county.  
 Lize, Alex. A., .....13th & Lombard, .....Philadelphia.  
 Llewellyn, John J., .....Kingston, .....Luzerne county.  
 Llewellyn, Wm. H., .....1410 Chestnut, .....Philadelphia.  
 Lloyd, Wm. E., Jr., M. D., Olyphant, .....Lackawanna county.  
 Locher, Mrs. Margaret, ..9 E. King, .....Lancaster.  
 Lochman, Chas. N., .....Bethlehem, .....Northampton county.  
 Lock, John H., .....2401 E. Huntingdon, .....Philadelphia.  
 Lock, Wm., .....1411 Orange, .....Philadelphia.  
 Lockhart, James R., ....Freedom, .....Beaver county.  
 Loder, C. G. A., .....1541 Chestnut, .....Philadelphia.  
 Loehle, John F., .....Lebanon, .....Lebanon county.  
 Loeper, Chas. P., .....1229 S. 21st, .....Philadelphia.  
 Loftus, John J., .....237 Wyoming ave., .....Scranton.  
 Logan, Rollin M., .....6th & Penn ave., .....Pittsburgh.  
 Lohmann, John, .....Edwardsdale, .....Luzerne county.  
 Lohmeyer, Henry L., ....1901 Carson, .....Pittsburgh.  
 Lomax, F. F., .....Monroeton, .....Bradford county.  
 Long, Chas. B., .....278 Rebecca, .....Allegheny.  
 Long, Chas. E., .....12 N. Queen, .....Lancaster.  
 Long, Chas. H., .....1301 N. 29th, .....Philadelphia.  
 Long, James G., .....11th & Berks, .....Philadelphia.  
 Long, John N. G., .....20th & Diamond, .....Philadelphia.  
 Long, Robert P., .....Mechanicsburg, .....Cumberland county.  
 Long, Samuel S., .....19 S. George, .....York.  
 Long, Wm. H., Jr., .....736 S. 13th, .....Philadelphia.  
 Long, Wm. W., .....300 N. 3d, .....Lewisburg.  
 Longmire, Chas. H., ....5610 Hancock, .....Germantown.  
 Longshaw, Thos. E., ....5517 Ridge ave., .....Philadelphia.  
 Longstreet, D. W., .....Carbondale, .....Lackawanna county.  
 Loop, Geo. D., .....North East, .....Erie county.  
 Lorah, James R., .....316 N. 10th, .....Philadelphia.  
 Lorah, Lester I., .....821 Penn ave., .....Pittsburgh.  
 Lorch, Carl P., .....1718 Carson, .....Pittsburgh.  
 Lorenz, Carl, .....418 Lackawanna ave., ....Scranton.  
 Lorman, M. Frank, .....1501 Dickinson, .....Philadelphia.  
 Lorman, Walter E., ....Passyunk & Wash'n ave., Philadelphia.  
 Loser, D. A., .....1744 N. 21st, .....Philadelphia.  
 Lostetter, Wm. H., .....Erie, .....Erie county.  
 Lott, Samuel, .....2946 N. 5th, .....Philadelphia.  
 Lou, Wm., .....1601 Carson, .....Pittsburgh.  
 Louderbough, F. P., ....672 N. 10th, .....Philadelphia.

Loughbridge, J. Daniel, ..2153 Centre ave., .....Pittsburgh.  
Loughbridge, Samuel S.,...4th & Indiana ave., .....Philadelphia.  
Louthier, J. M., .....Somerset, .....Somerset county.  
Love, Jesse B., .....New Castle, .....Lawrence county.  
Love, Sylvester M., .....Rixford, .....McKean county.  
Lowe, Clement B., .....Mt. Airy, .....Philadelphia.  
Lowe, Samuel A., .....Scottdale, .....Westmoreland county.  
Lowenberg, Joseph, .....213 E. Main, .....Norristown.  
Luburg, Leon F., .....643 Arch, .....Philadelphia.  
Lucas, Harry C., .....419 7th ave., .....Pittsburgh.  
Luebert, August G., .....2329 Sharswood, .....Philadelphia.  
Luerssen, Frank, .....1410 Chestnut, .....Philadelphia.  
Luke, Harry C., .....Salamanca, .....New Jersey.  
Luks, Emil C., .....Royersford, .....Montgomery county.  
Luks, Robert A., .....Royersford, .....Montgomery county.  
Lupin, Emanuel, .....6th & Lombard, .....Philadelphia.  
Lupus, Herman E., .....22d & Berks, .....Philadelphia.  
Lutz, David P., Jr., .....Shiloh & Sycamore, .....Pittsburgh.  
Lutz, Henry O., .....1033 5th ave., .....Pittsburgh.  
Lutz, Horace C., .....Wilkes-Barre, .....Luzerne county.  
Lutz, Irwin B., .....Denver, .....  
Lutz, Isaac D., .....Harrisburg, .....Dauphin county.  
Lutz, Walter P., .....5th & Callowhill, .....Philadelphia.  
Lutz, Wm. D., .....6378 Main, .....Germantown.  
Lydell, James, .....Cambridgeboro, .....Crawford county.  
Lyman, David C., .....21st & Norris, .....Philadelphia.  
Lynch, Chas. A., .....Elizabeth, .....Allegheny county.  
Lynch, Daniel J., .....1267 S. 23d, .....Philadelphia.  
Lynch, Wm. C., .....6897 Hamilton ave., .....Pittsburgh.  
Lyon, Arthur M., .....918 Main, .....Sharpsburg.  
MacAdams, Wm. J., .....2200 5th ave., .....Pittsburgh.  
MacCartney, J. C., .....Kipple, .....Blair county.  
MacCracken, E. G., .....8th & Arch, .....Philadelphia.  
MacDonald, Fred T., .....Kennett Square, .....Chester county.  
Mack, John S., .....Slatington, .....Lehigh county.  
Mackey, Harry W., .....Beaver Falls, .....Beaver county.  
Mackey, John W., .....416 Foster, .....Harrisburg.  
MacInall, Edward, .....1225 Walnut, .....Philadelphia.  
MacIntosh, J. C., .....Erie, .....Erie county.  
MacKenzie, Robert W.,...Butler, .....Butler county.  
MacNair, Edward D., ....Moore & Passyunk ave.,...Philadelphia.  
MacPherson, Ivan L., ....Warren, .....Warren county.  
Maddock, Wm. W., .....Chester, .....Delaware county.  
Madeira, Robert W., ....6th & Walnut, .....Reading.  
Magee, M. V., .....Conshohocken, .....Montgomery county.  
Maggini, A. P., .....Braddock, .....Allegheny county.  
Magill, Robert D., .....Danville, .....Montour county.  
Magowan, James D., .....Kane, .....McKean county.  
Maier, John, .....2631 Kensington ave., ....Philadelphia.  
Main, Clinton E., .....Main & Pearl, .....Norristown.  
Main, Comer B., .....Union City, .....Erie county.  
Maisch, Henry C. C., .....854 N. 10th, .....Philadelphia.  
Maize, Chas. F., .....353 Queen Lane, .....Germantown.

Male, Geo. S., .....Carbondale, .....Lackawanna county.  
 Malpass, Wm. H., .....4th & Chestnut, .....Philadelphia.  
 Mancher, Joseph V., .....Carrolltown, .....Cambria county.  
 Mangolin, Fannie B., ...425 S. 3d, .....Philadelphia.  
 Manko, Emanuel, .....724 N. 11th, .....Philadelphia.  
 Manley, James A., .....Scranton, .....Lackawanna county.  
 Manlove, Harry C., .....1600 Pine, .....Philadelphia.  
 Mann, Wm. C., .....Main & Cotton, .....Manayunk.  
 Manners, Wm. R., .....Moosic.  
 Manning, Chas. L., .....Bound Brook, .....New Jersey.  
 Maples, Murff F., .....Camden, .....New Jersey.  
 Marchland, Samuel R., ..Greensburg, .....Westmoreland county.  
 Marcy, Chas. H., .....Tunkhannock, .....Wyoming county.  
 Marcy, Wm. L., .....Dunmore, .....Lackawanna county.  
 Maris, Robert W., .....2138 Market, .....Philadelphia.  
 Markel, Chester F., .....Columbia, .....Lancaster county.  
 Markell, Frank E., .....Connellsville, .....Fayette county.  
 Markell, S. C., .....Monongahela, .....Washington county.  
 Markell, W. Grayson, ....6219 Penn ave., .....Pittsburgh.  
 Marsden, Josh E., .....1727 Vine, .....Philadelphia.  
 Marshall, Archy S., .....Portersville, .....Butler county.  
 Marshall, Daniel W., .....319 Bourse building, ....Philadelphia.  
 Marshall, Donaldson, ....112 Market, .....Philadelphia.  
 Marshall, Robert T., ....112 Market, .....Philadelphia.  
 Marshall, Thos. D., .....Blairsville, .....Indiana county.  
 Martin, Andrew E., .....Greensburg, .....Westmoreland county.  
 Martin, David G., .....New Holland, .....Lancaster county.  
 Martin, Emlen, .....Bristol, .....Bucks county.  
 Martin, Geo., .....Conemaugh, .....Cambria county.  
 Martin, Hugh H., .....Franklin, .....Venango county.  
 Martin, John E., .....Jersey Shore, .....Lycoming county.  
 Martin, Wm. C., .....238 8th ave., .....Homestead.  
 Martindell, Wm. N., .....306 Cherry street, .....Philadelphia.  
 Martsolf, Jacob H., .....Beaver, .....Beaver county.  
 Martsolf, Wm. P., .....New Brighton, .....Beaver county.  
 Martz, Wm. K., .....Front & Pine, .....Steelton.  
 Marsh, Geo. E., .....Townville, .....Crawford county.  
 Masholder, Jacob H., .....28th & Master, .....Philadelphia.  
 Mason, Geo. W., .....Lock Haven, .....Clinton county.  
 Masters, C. G., .....Everett, .....Bedford county.  
 Matchett, Christie R., ....West Bridgewater, .....Beaver county.  
 Mateer, J. Ross, .....1501 11th ave., .....Altoona.  
 Mateer, R. M., .....Shelocta, .....Indiana county.  
 Matson, Wm. F., .....6101 Penn ave., .....Pittsburgh.  
 Matter, Robert B., .....1106 Chestnut, .....Philadelphia.  
 Mattern, Rolland B., .....Oil City, .....Venango county.  
 Mather, Chas. V., .....Bear Lake, .....Warren county.  
 Mathews, Wm. Joseph, ..2530 N. 11th, .....Philadelphia.  
 Mathlott, Geo. H., .....Mt. Jackson, .....Lawrence county.  
 Matos, Louis A., .....3943 Fairmount ave., ....Philadelphia.  
 Matusow, Harry, .....1060 N. 2d, .....Philadelphia.  
 Mattern, Wm. K., .....1216 Allegheny ave., ....Philadelphia.  
 Matthes, Frank A., .....Lebanon, .....Lebanon county.

Matthews, Abel J., .....Branchtown, .....Philadelphia.  
 Matthews, Chas. W., .....Scranton, .....Lackawanna county.  
 Matthews, Richard J., ...320 Lackawanna ave., ...Scranton.  
 Matthews, W. L., .....25th & Christian, .....Philadelphia.  
 Mauk, Geo. W., Jr., .....Claysburg, .....Blair county.  
 Mauligk, Wm. F., .....Columbia, .....Lancaster county.  
 Maurer, Geo. B., .....21st & Fitzwater, .....Philadelphia.  
 Maxey, Benj. F., .....Wyoming ave. & Spruce, ...Scranton.  
 Maxwell, Wm. P., .....Troy, .....Bradford county.  
 May, Geo. R., .....Lebanon, .....Lebanon county.  
 May, Rollin R., .....2441 Brown, .....Philadelphia.  
 Mayer, Albert H., .....Main & Cotton, .....Manayunk.  
 Mayer, Chas. E., .....Boyertown, .....Berks county.  
 Mayer, Max B., .....6640 Germantown ave., ..Philadelphia.  
 Mayer, Thos. E., .....Renovo, .....Clinton county.  
 Mayhew, Chas. H., .....28th & Columbia ave., ...Philadelphia.  
 Mayo, Fred. H., .....31 McClure ave., .....Allegheny.  
 McAllister, James A., ....New Brighton, .....Beaver county.  
 McAnallen, Florine, .....Monaca, .....Beaver county.  
 McAniff, Hugh P., .....153 Lincoln, .....Wilkes-Barre.  
 McBride, Hermann J., ...Etna, .....Allegheny county.  
 McBride, Homer J., ....Ohio & Federal, .....Allegheny.  
 McBride, James E., .....So. Bethlehem, .....Northampton county.  
 McBrinn, Andrew W., ....1513 N. Garnet, .....Philadelphia.  
 McCain, Stuart B., .....Rush, .....Susquehanna county.  
 McAllister, Wm. C., .....Monongahela, .....Washington county.  
 McCandless, Chas. S., ....100 Victoria street, .....Pittsburgh.  
 McCandless, Edward S., ..1508 S. 20th street, .....Philadelphia.  
 McCarthy, James, .....509 5th ave., .....Pittsburgh.  
 McCarthy, P. T., .....Oil City, .....Venango county.  
 McCarthy, Willard E., ...5105 Liberty ave., .....Pittsburgh.  
 McCartney, F. S., .....9th & Spring Garden, ...Philadelphia.  
 McCartney, Warren C., ..Coalport, .....Clearfield county.  
 McCartney, Wm. B., ....7 Knoll street, .....Allegheny.  
 McCarty, R. H., .....874 Holly street, .....Philadelphia.  
 McCaskey, C. A., .....Bollivar, .....Westmoreland county.  
 McCausland, R. James, ..Montrose, .....Susquehanna county.  
 McCaw, Geo. S., .....New Brighton, .....Beaver county.  
 McClaran, James F., ....11th ave. & 16th, .....Philadelphia.  
 McClaran, Joe A., .....Saltsburg, .....Indiana county.  
 McClaran, Sarah E., .....Sewickley, .....Allegheny county.  
 McClaran, Wm. L., .....Sewickley, .....Allegheny county.  
 McCleary, Harry W., .....1124 Snyder ave., .....Philadelphia.  
 McCleary, Joseph A., ....615 12th street, .....Altoona.  
 McCleery, Samuel B., ....37½ N. Prince, .....Lancaster.  
 McClelland, James B., ...Kittanning, .....Armstrong county.  
 McClelland, James R., ...315 Federal street, .....Allegheny.  
 McClelland, John C., ....Freeport, .....Armstrong county.  
 McClintock, James, .....222 W. Mt. Pleasant ave., Germantown.  
 McClintock, Theo. B., ....2134 Green, .....Philadelphia.  
 McClintock, Wm. C., .....125 Market, .....Philadelphia.  
 McCloskey, C. E. R., ....123 Ohio, .....Allegheny.  
 McCloskey, Wilson C., ...Duquesne, .....Allegheny county

McCloud, Benton, .....Darlington, .....Beaver county.  
 McCloud, Myron H., .....Darlington, .....Beaver county.  
 McClure, Berthier, .....201 Franklin ave., .....Wilksburg.  
 McClure, Carlton E., ....New Castle, .....Lawrence county.  
 McClure, Chas. N., .....2153 Lawrence, .....Philadelphia.  
 McClure, Howard W., ...Hazleton, .....Luzerne county.  
 McClure, Wm. P., .....Sheffield, .....Warren county.  
 McCollin, James G., Jr.,...2001 Fairmount ave., .....Philadelphia.  
 McCollin, John, .....3722 Brown, .....Philadelphia.  
 McComb, Alonzo D., .....Hawthorn, .....Clarion county.  
 McConaughy, Thos. S., ..Washington, .....Washington county.  
 McConnell, James L., ....Leetsdale, .....Allegheny county.  
 McConnell, John C., .....New Milford, .....Susquehanna county.  
 McConomy, Paul L., ....813 N. 21st, .....Philadelphia.  
 McCorkle, Wm., .....12th & Somerset, .....Philadelphia.  
 McCormick, Blanche, ....244 W. King, .....Lancaster.  
 McCormick, D. H., .....Connellsville, .....Fayette county.  
 McCormick, Harry C., ....Connellsville, .....Fayette county.  
 McCormick, Henry C., ..Pen Argyl, .....Northampton county.  
 McCormick, Sallie, .....244 W. King, .....Lancaster.  
 McCoulrey, W. J., .....113 Federal, .....Allegheny.  
 McCouch, John W., .....720 S. 21st, .....Philadelphia.  
 McCoy, Henry L., .....Smethport, .....McKean county.  
 McCoy, Thos. F., .....Conshohocken, .....Montgomery county.  
 McCracken, James H., ...Darby, .....Delaware county.  
 McCrea, James T., .....Creekside, .....Indiana county.  
 McCreary, Joseph R., ....Homewood & Ham'n av., Pittsburgh.  
 McCreight, Chas., .....1358 Marlborough, .....Philadelphia.  
 McCullough, Clem. B., ...Oxford, .....Chester county.  
 McCullough, M. L., .....Oxford, .....Chester county.  
 McCullough, Peter A., ....4823 Penn ave., .....Pittsburgh.  
 McCurdy, Wilbur E., .....Burgettstown, .....Washington county.  
 McCurdy, John A., .....Steelton, .....Dauphin county.  
 McDanel, Harry, .....Highspire, .....Dauphin county.  
 McDonald, Chas. R., .....Whitney, .....Westmoreland county.  
 McDonald, David, .....1719 5th ave., .....Pittsburgh.  
 McDonald, G. F., .....171 Beaver ave., .....Allegheny.  
 McDonald, John A., ...:....Reedsville, .....Mifflin county.  
 McDonald, J. S., .....157 Robinson, .....Allegheny.  
 McDonald, Wm. A., .....Lewistown, .....Mifflin county.  
 McDonnell, Chas. P., .....15th & Ritner, .....Philadelphia.  
 McDonnell, Joseph F., ....Centralla, .....Columbia county.  
 McDonnell, Wm. J., Jr., ..1723 S. Mole, .....Philadelphia.  
 McDonough, Oscar T., ...Charlerol, .....Washington county.  
 McElhenny, Peter, .....Pittston, .....Luzerne county.  
 McElroy, James C., .....169 North ave., .....Allegheny.  
 McEwen, Chas. M., .....Plumville, .....Indiana county.  
 McFadden, James F., ....6th & Duquesne Way, ...Pittsburgh.  
 McFadden, John J., .....1440 S. 20th, .....Philadelphia.  
 McFadden, Robert, .....3201 Powelton ave., .....Philadelphia.  
 McFadden, Thos. F. J., ...34th & Pine, .....Philadelphia.  
 McFadden, Wm., .....921 S. 10th, .....Philadelphia.  
 McFarland, John R., ....Saltsburg, .....Indiana county.

McFarland, W. S., .....Sharpville, .....Indiana county.  
 McFayden, W. T., .....410 W. 8th, .....Erie.  
 McFeeters, Andrew J., ...4316 Westminster ave., ..Philadelphia.  
 McFerran, J. D., .....12th & Race, .....Philadelphia.  
 McGann, Michael J., .....Wilkinsburg, .....Allegheny county.  
 McGarr, J. L., .....218 Market, .....Pittsburgh.  
 McGarrah, Wm. H., .....Scranton, .....Lackawanna county.  
 McGary, Robert M., .....Mechanicsburg, .....Cumberland county.  
 McGee, T. J., .....Lowry & Branch, .....Allegheny.  
 McGee, Saylor J., .....520 N. 5th, .....Philadelphia.  
 McGehee, Hanford B., ...4099 Lancaster ave., .....Philadelphia.  
 McGibbons, Harry, .....Dunbar, .....Fayette county.  
 McGinness, John S., .....Lock Haven, .....Clinton county.  
 McGowan, Samuel H., ...Lebanon, .....Lebanon county.  
 McGrath, Joseph S., .....220 Bushton ave., .....Pittsburgh.  
 McGraw, Wm. H., .....Boston, .....Massachusetts.  
 McGrew, Thos. B., .....Finleyville, .....  
 McGuffin, Geo. L., .....New Castle, .....Lawrence county.  
 McGuire, Thos. E., .....Mahanoy City, .....Schuylkill county.  
 McHale, Frank P., .....Dunmore, .....Lackawanna county.  
 McHenry, Thos., .....528 Wood street, .....Pittsburgh.  
 McHenry, Walter G., ....1818 Frankford ave., .....Philadelphia.  
 McIntosh, John R., .....3928 Market, .....Philadelphia.  
 McIntyre, Wm., .....2429 Frankford ave., .....Philadelphia.  
 McJunkin, Walter L., ....Clearfield, .....Clearfield county.  
 McKean, A. J., .....Mercer, .....Mercer county.  
 McKee, David M., .....Dunbar, .....Fayette county.  
 McKee, Harry A., .....Homestead, .....Allegheny county.  
 McKee, John L., .....Chicora, .....Butler county.  
 McKee, Mrs. N. A., .....Plymouth, .....Luzerne county.  
 McKee, Nannie E., .....Homestead, .....Allegheny county.  
 McKelvey, Geo. A., .....Bloomsburg, .....Columbia county.  
 McKeown, Arthur H. L.,...80 Washington ave., .....Pittsburgh.  
 McKinney, Robert A., ....Plain Grove, .....Lawrence county.  
 McKnight, Wm. A., .....Sharon, .....Mercer county.  
 McLain, J. R., .....Claysville, .....Washington county.  
 McLain, Wm. J. E., ....Claysville, .....Washington county.  
 McLaughlin, Chas. B., ...Camden, .....New Jersey.  
 McLaughlin, Geo. A., ...Delmont, .....Westmoreland county.  
 McLaughlin, Philip C., ..1724 Poplar, .....Philadelphia.  
 McLean, C. N., .....Union City, .....Erie county.  
 McLees, Warden J., .....Lock Haven, .....Clinton county.  
 McLure, Bert. G., .....835 5th ave., .....McKeesport.  
 McLure, John H., .....Prospect, .....Butler county.  
 McMechen, Wm. B., .....3740 Lancaster ave., .....Philadelphia.  
 McMichael, James C., ...Warren, .....Warren county.  
 McMichael, Josiah K., ....Washington, .....Washington county.  
 McMillan, Edwin H., ....Braddock, .....Allegheny county.  
 McMillan, John K., .....Washington, .....Washington county.  
 McMullin, Andrew, .....2060 E. York, .....Philadelphia.  
 McMurray, Chas. F., .....W. Penna. Hospital, ....Pittsburgh.  
 McMurray, Henry B., .....Burgettstown, .....Washington county.  
 McMurtrie, David, .....1106 11th street, .....Altoona.

McNabb, Henry S., .....127 S. 4th, .....Philadelphia.  
 McNally, Richard, .....633 33d street, .....Pittsburgh.  
 McNaughton, N. W., ....Westfield, .....Tloga county.  
 McNeal, Wm. T., .....Hazleton, .....Luzerne county.  
 McNeil, Robert, .....120 W. York, .....Philadelphia.  
 McNitt, Gilbert F., .....Sheffield, .....Warren county.  
 McNulty, C. J., .....22 N. Main, .....Washington.  
 McVean, Willard, .....St. Marys, .....Elk county.  
 Meade, Julian F., .....625 S. 16th, .....Philadelphia.  
 Means, Wm. B., .....Lebanon, .....Lebanon county.  
 Means, Wm. B., .....435 6th ave., .....Pittsburgh.  
 Mears, Henry, .....Towanda, .....Bradford county.  
 Mebus, Fred. L., .....114 S. 3d street, .....Easton.  
 Meck, Warren E., .....Danville, .....Montour county.  
 Medd, Henry, .....Huntingdon & Tulip, ....Philadelphia.  
 Megilligan, Chas. H., ....Avondale, .....Chester county.  
 Megown, Samuel R., ....New Castle, .....Lawrence county.  
 Meler, August J., .....108 N. 6th, .....Philadelphia.  
 Meister, Samuel E., .....143 S. Duke, .....Lancaster.  
 Melhorn, Augustus H., ...Hanover, .....York county.  
 Melick, Ralph L., .....107 S. Main, .....Shenandoah.  
 Melick, Wm. McC., .....Philipsburg, .....Centre county.  
 Mell, Samuel S., .....204 S. 2d, .....Harrisburg.  
 Melvin, Edward J., .....601 Pittston ave., .....Scranton.  
 Melvin, Ernest H., .....161 5th ave., .....Pittsburgh.  
 Mendenhall, H. C., .....Bloomsburg, .....Columbia county.  
 Menger, Edward F., ....10th & York, .....Philadelphia.  
 Mensch, James G., .....Pennsburg, .....Montgomery county.  
 Mentzer, Harlan J., .....Waynesboro, .....Franklin county.  
 Mentzer, Harvey H., ....15th & Market, .....Philadelphia.  
 Mercer, Clarence P., ....Bellaire, .....Ohio.  
 Meredith, Harry L., .....241 N. 12th, .....Philadelphia.  
 Meredith, S. C., .....1124 S. 22d, .....Philadelphia.  
 Merrell, Albert F., .....19th & Fairmount ave., ..Philadelphia.  
 Merrifield, Robert, .....213 N. Main, .....Scranton.  
 Mershon, E. N. B., .....Saxonburg, .....Butler county.  
 Mervine, Graydon D., ....Milton, .....Northumberland county.  
 Messenger, G. G., .....Johnsonburg, .....  
 Metz, Abraham L., .....Shippensburg, .....Cumberland county.  
 Metz, Frank M., .....Etna, .....Allegheny county.  
 Metzger, Geo. F., .....W. Bethlehem, .....Northampton county.  
 Metzler, Claude D., .....124 W. Thompson, .....Philadelphia.  
 Metzler, Walter S., .....7910 Germantown ave., ...Philadelphia.  
 Meyer, Chas. C., .....341 N. 18th, .....Philadelphia.  
 Meyer, J. Gross, .....Wilkes-Barre, .....Luzerne county.  
 Meyer, Robert H., .....Nanticoke, .....Luzerne county.  
 Meyers, Geo. C., .....Dallastown, .....York county.  
 Meyers, Kirby C., .....Beaver Falls, .....Beaver county.  
 Meyers, Louis J., .....20th & York, .....Philadelphia.  
 Michael, Geo. Albert, ....2335 Berks, .....Philadelphia.  
 Michael, John D., .....Meadville, .....Crawford county.  
 Michelotti, Victor, .....737 S. 8th, .....Philadelphia.  
 Michener, Elmer D., .....1830 Mervine, .....Philadelphia.



Michener, Wm., .....Deemston, .....  
 Micke, Lewis A., .....Easton, .....Northampton county.  
 Mickley, Ewald G. F., ....28th & Girard ave., .....Philadelphia.  
 Mierziwa, Richard R. E., 4724 Liberty ave., .....Pittsburgh.  
 Middleton, Claude R., ...1926 Mervine, .....Philadelphia.  
 Mikle, John O., .....920 Greenridge, .....Scranton.  
 Miller, Aaron G., .....1840 Christian, .....Philadelphia.  
 Miller, Adolph W., .....3d & Callowhill, .....Philadelphia.  
 Miller, Albert T., .....2923 N. 9th, .....Philadelphia.  
 Miller, Andrew O., .....Eau Claire, .....Butler county.  
 Miller, Bertrand L., .....Liberty, .....Tioga county.  
 Miller, Chas. A., .....Liberty, .....Tioga county.  
 Miller, Daniel L., .....Waynesboro, .....Franklin county.  
 Miller, Eli E., .....Beaver Falls, .....Beaver county.  
 Miller, Frank, .....Danville, .....Montour county.  
 Miller, Geo. H., .....McDonald, .....Washington county.  
 Miller, Geo. M., .....1401 Washington ave., ...Philadelphia.  
 Miller, Geo. S. R., .....1301 8th ave., .....Altoona.  
 Miller, Gus. J., .....1520 Peach, .....Erie.  
 Miller, Harper G., .....4939 Germantown ave., ..Philadelphia.  
 Miller, Jacob, .....10th & Market, .....Philadelphia.  
 Miller, Jacob A., .....35 S. 2d, .....Harrisburg.  
 Miller, Jacob F., .....Beaver Falls, .....Beaver county.  
 Miller, James A., .....56 N. Queen, .....Lancaster.  
 Miller, J. C., .....2406 Garnet, .....Philadelphia.  
 Miller, John H., .....Newville, .....Cumberland county.  
 Miller, John Henry, .....238 N. 12th, .....Philadelphia.  
 Miller, John P., .....15 N. 11th, .....Philadelphia.  
 Miller, John L., .....Montgomery, .....Lycoming county.  
 Miller, Milton G., .....Blairsville, .....Indiana county.  
 Miller, Phillip, .....Hanover, .....York county.  
 Miller, Samuel G., .....426 6th ave., .....McKeesport.  
 Miller, Samuel R., .....Bath, .....Northampton county.  
 Miller, Solomon M., .....State Hospital, .....Norristown.  
 Miller, Summerfield J., ..Madera, .....Clearfield county.  
 Miller, Warren D., .....Avondale, .....Chester county.  
 Miller, Wm. Fredk., .....236 Manhattan, .....Allegheny.  
 Milligan, Decatur, .....509 N. 2d, .....Philadelphia.  
 Mills, John C., .....Duke Centre, .....McKean county.  
 Mills, Leopold J., .....1602 Susquehanna ave., ..Philadelphia.  
 Minnick, Geo., Jr., .....86 Monterey street, .....Allegheny.  
 Minnick, Luther W., .....1021 Market, .....Philadelphia.  
 Minnick, W. G., .....1410 Monterey, .....Allegheny.  
 Minster, P. M., .....Langhorne, .....Berks county.  
 Minton, Henry M., .....526 S. 16th, .....Philadelphia.  
 Mitchell, Albert T., .....124 N. 13th, .....Philadelphia.  
 Mitchell, Benj. B., .....Troy, .....Bradford county.  
 Mitchell, Henry, .....1230 Everett, .....Philadelphia.  
 Mitchell, Henry F., .....5202 Butler, .....Pittsburgh.  
 Mitchell, Richard W., ....Cape May, .....New Jersey.  
 Mitchell, Robert H., .....884 N. Taylor, .....Philadelphia.  
 Mitchell, W. H., .....Driftwood, .....Cameron county.  
 Mitchell, Wm. S., .....Susquehanna, .....Susquehanna county.

|                       |                       |                        |
|-----------------------|-----------------------|------------------------|
| Mix, Wesley H.,       | Sugar Grove,          | Warren county.         |
| Mix, Wilber F.,       | Sugar Grove,          | Warren county.         |
| Moeller, C. A. F.,    | 116 N. 13th,          | Harrisburg.            |
| Moeller, Carl F. C.,  | 1200 Race,            | Philadelphia.          |
| Moerk, Frank X.,      | 2510 Brown,           | Philadelphia.          |
| Moffet, James, Jr.,   | 520 W. Venango,       | Philadelphia.          |
| Moffet, John, Jr.,    | 1614 N. 42d,          | Philadelphia.          |
| Moffet, Wm.,          | 1614 N. 42d,          | Philadelphia.          |
| Mohn, Chas. L.,       | Jersey Shore,         | Lycoming county.       |
| Mohn, Geo. C.,        | Laurelton,            | Union county.          |
| Mohn, John E.,        | Jersey Shore,         | Lycoming.              |
| Moll, Horace,         | 232 E. Price street,  | Germantown.            |
| Moller, John D.,      | 17th & Passyunk ave., | Philadelphia.          |
| Monaghan, Thos. F.,   | 2327 N. 3d,           | Philadelphia.          |
| Monie, Thos.,         | Archbald,             | Lackawanna county.     |
| Monks, Fredk. C.,     | Kittanning,           | Armstrong county.      |
| Montellius, R. W.,    | Mt. Carmel,           | Northumberland county. |
| Montgomery, A. L. R., | Mercer,               | Mercer county.         |
| Montgomery, Chas. L., | Mercer,               | Mercer county.         |
| Montgomery, E. J.,    | 206 S. Main,          | Pittsburgh.            |
| Montgomery, John C.,  | Chambersburg,         | Franklin county.       |
| Montgomery, Wm. H.,   | Pitcairn,             |                        |
| Montgomery, Wm. R.,   | Mercer,               | Mercer county.         |
| Moody, Chas. W.,      | Red Lion,             | York county.           |
| Moody, Wm. E.,        | Tremont,              | Schuylkill county.     |
| Moon, J. R.,          | Camden,               | New Jersey.            |
| Mooney, Frank M.,     | Bridesburg,           | Philadelphia.          |
| Moor, Allison,        | Saegertown,           | Crawford county.       |
| Moore, Christian,     | Bryn Mawr,            | Montgomery county.     |
| Moore, Geo. Cooper,   | 1932 N. 11th,         | Philadelphia.          |
| Moore, Howard A.,     | Howard,               | Centre county.         |
| Moore, Isaac H.,      | 293 S. Main,          | Wilkes-Barre.          |
| Moore, James C.,      | Connellsville,        | Fayette county.        |
| Moore, James J.,      | 1300 S. 5th,          | Philadelphia.          |
| Moore, James P.,      | Rochester,            | Beaver county.         |
| Moore, Joackin B.,    | 13th & Lombard,       | Philadelphia.          |
| Moore, Wm. D.,        | Juniataville,         | Fayette county.        |
| Moore, Wm. I.,        | Homer City,           | Indiana county.        |
| Moorhead, Frank B.,   | Volant,               | Armstrong county.      |
| Moosbrugger, Otto,    | 1231 Arch,            | Philadelphia.          |
| Moreland, James A.,   | Jamestown,            | Mercer county.         |
| Morell, Chas. M.,     | 5149 Master,          | Philadelphia.          |
| Morey, John S., Jr.,  | Royersford,           | Montgomery county.     |
| Morgan, Aston H.,     | Market & Meade,       | Wilkes-Barre.          |
| Morgan, Benj. G.,     | 223 S. Main ave.,     | Scranton.              |
| Morgan, Clayton E.,   | 1629 Walnut,          | Philadelphia.          |
| Morgan, Edward A.,    | 369 E. Market,        | Wilkes-Barre.          |
| Morgan, Emily C.,     | 223 S. Main ave.,     | Scranton.              |
| Morgan, Frank E.,     | 1629 Walnut,          | Philadelphia.          |
| Morgan, Frank W.,     | 830 Scott,            | Philadelphia.          |
| Morrett, Wm. H.,      | 18th & Lombard,       | Philadelphia.          |
| Morrell, Chas. J.,    | 5149 Master,          | Philadelphia.          |
| Morris, Chas. H.,     | Millheim,             | Centre county.         |

Morris, Clinton S., .....Garland, .....Warren county.  
 Morris, David Henry, ....686 Preble ave., .....Allegheny.  
 Morris, Frank D., .....Montrose, .....Susquehanna county.  
 Morris, Frank R.,.....Monaca, .....Beaver county.  
 Morris, Joseph G., .....3646 N. Broad, .....Philadelphia.  
 Morris, Max, .....1336 Green, .....Philadelphia.  
 Morris, Thos. R., .....686 Preble ave., .....Allegheny.  
 Morris, Wm. H.,.....5621 Nelson, .....Philadelphia.  
 Morrison, Bower E., ....Newton Hamilton, .....Mifflin county.  
 Morrison, James, .....Roxborough, .....Philadelphia.  
 Morrison, James D., ....Mercer, .....Mercer.  
 Morrison, John A., .....Cochranville, .....Chester county.  
 Morrison, Robert, .....Oak Dale, .....Allegheny county.  
 Morrison, Wm. M.,.....Roxborough, .....Philadelphia.  
 Morriss, Lemuel G., ....2d & Green, .....Philadelphia.  
 Morrow, J. Wilson, ....Marchand, .....Indiana county.  
 Morse, Frank, .....22d & Christian, .....Philadelphia.  
 Morse, H. B., .....1701 South street, .....Philadelphia.  
 Morse, John E. G., .....Oil City, .....Venango county.  
 Morton, Alex. R., .....Morton, .....Delaware county.  
 Morton, Robert W., ....Wampum, .....Lawrence county.  
 Morton, Wm. J.,.....734 N. 11th, .....Reading.  
 Mosbaugh, L. P. H., ....85 James street, .....Allegheny.  
 Mosebach, F. A., .....822 W. Lehigh ave., .....Philadelphia.  
 Moser, Altha L., .....Uniontown, .....Fayette county.  
 Moser, Ira D., .....1020 S. 2d, .....Philadelphia.  
 Mountain, Lloyd L., ....Confluence, .....Somerset county.  
 Mountain, Walter S., ....Confluence, .....Somerset county.  
 Mowry, Joseph D.,.....Chester, .....Delaware county.  
 Mowers, Joseph H., .....Shippensburg, .....Cumberland county.  
 Moyer, Edwin O., .....Bradford, .....McKean county.  
 Moyer, Elmer E., .....Bloomsburg, .....Columbia county.  
 Moyer, John L., .....Bloomsburg, .....Columbia county.  
 Moyer, Lucas N., .....Bloomsburg, .....Columbia county.  
 Moyer, Reuben E., .....10th & Elm, .....Reading.  
 Moyer, Wm. H., .....Dalmatia, .....Northumberland county.  
 Moyer, Wm. P., .....Freeburg, .....Snyder county.  
 Moyer, Wm. S., .....Bloomsburg, .....Columbia county.  
 Mueller, Henry, .....4434 Lancaster ave., .....Philadelphia.  
 Muhlenberger, Henry M., 34 S. 5th, .....Reading.  
 Muir, Clarence F., .....Wissahickon, .....Philadelphia.  
 Mull, Harry, .....Morrisville, .....Bucks county.  
 Mullen, James D., .....Warren, .....Warren county.  
 Mullen, James J., .....5999 Centre ave., .....Pittsburgh.  
 Mullen, Benj. F.,.....Monongahela, .....Washington county.  
 Mullhart, Alfred, .....St. Marys, .....Elk county.  
 Mullock, Corwin, .....19th & Dauphin, .....Philadelphia.  
 Mumma, Frank G., .....2500 Jefferson, .....Philadelphia.  
 Munsch, Jennie S., .....Bellevue, .....Allegheny county.  
 Murshower, John, .....Hillsdale, .....Susquehanna county.  
 Murdock, Alex., Jr., .....Washington, .....Washington county.  
 Murdock, Geo. C., .....Oil City, .....Venango county.  
 Murjahn, Louis, .....5th & Queen, .....Philadelphia.

Murphy, E. O., .....West Newton, .....Westmoreland county.  
 Murphy, F. E., .....3335 Woodland, .....Philadelphia.  
 Murphy, John F., .....2 Carson, .....Pittsburgh.  
 Murphy, Joseph, .....1041 S. 3d, .....Philadelphia.  
 Murphy, Michael, C.,.....23d & Wharton, .....Philadelphia.  
 Murphy, Thos. W., .....East Brady, .....Clarion county.  
 Murray, Bernard J., .....6622 Germantown ave., ..Philadelphia.  
 Murray, Edward R., .....3017 Frankford ave., ....Philadelphia.  
 Murray, J. A., .....Clearfield, .....Clearfield county.  
 Murray, Jared D., .....Centre Hall, .....Centre county.  
 Murray, John R., .....Kittanning, .....Armstrong county.  
 Murray, Wm. R., .....21st & Pine, .....Philadelphia.  
 Murto, Harry C., .....2907 Carson, .....Pittsburgh.  
 Musgrave, Aaron W., ....101 N. Main ave., .....Scranton.  
 Musselman, David E. G., 839 N. 20th, .....Philadelphia.  
 Musselman, D. Z., .....Braddock, .....Allegheny county.  
 Musselman, John, .....4000 Chestnut, .....Philadelphia.  
 Musselman, Morris M., ...Gettysburg, .....Adams county.  
 Musser, Frank M., .....Lewistown, .....Mifflin county.  
 Musser, Omar H., .....Manheim, .....Lancaster county.  
 Mussina, Chas. C., .....2500 Penn ave., .....Washington, D. C.  
 Musson, Wm. A., .....1500 S. Broad, .....Philadelphia.  
 Muthersbough, Jacob A., Lewistown, .....Mifflin county.  
 Myers, A. A., .....320 De Kalb, .....Norristown.  
 Myers, A. Harold, .....Scottdale, .....Westmoreland county.  
 Myers, Chas. L., .....York Springs, .....Adams county.  
 Myers, Henry J., .....514 S. 24th, .....Philadelphia.  
 Myers, John F., .....320 Lackawanna ave., ...Scranton.  
 Myers, Josiah J., .....Nescopeck, .....Luzerne county.  
 Myers, Samuel J., .....Emlenton, .....Venango county.  
 Myers, Wm. H., .....Marietta, .....Lancaster county.  
 Myers, Wm. T., .....4th & Susquehanna ave., Philadelphia.  
 Nace, W. B., .....Halifax, .....Dauphin county.  
 Nagle, Clayton M., .....15th & Master, .....Philadelphia.  
 Nagle, Fredk. S., .....W. Nanticoke, .....  
 Nagle, Thos. S., .....Allentown, .....Lehigh county.  
 Nail, Lorenzo G., .....Ellwood City, .....Lawrence county.  
 Naylor, Mrs. K. Elizab'th, 755 S. 10th, .....Philadelphia.  
 Neamand, Harry, .....Perkasie, .....  
 Nebel, Chas. W., .....2000 N. Front, .....Philadelphia.  
 Nebig, Wm. G., .....18th & Susquehanna ave., Philadelphia.  
 Neef, Jacob W., .....1015 Columbia ave., ....Philadelphia.  
 Neely, Alex E., .....Bennett, .....Allegheny county.  
 Neely, Chas. G., .....29th & Gordon, .....Philadelphia.  
 Neely, John F., .....Beaver, .....Beaver county.  
 Neely, Joseph A., .....29 Garrison street, .....Allegheny.  
 Neely, Wm. O., .....Bradford, .....McKean county.  
 Neff, Geo. W., .....York, .....York county.  
 Neff, Harry G., .....Dawson, .....Fayette county.  
 Neill, Alfred D., .....Marienville, .....Forest county.  
 Nelson, Wm. H., .....424 Fairmount ave., .....Philadelphia.  
 Nemon, Luther M., .....New Kensington, .....  
 Neuber, Geo. G. E., .....2808 Girard ave., .....Philadelphia.

Nevln, Wm. Scott, .....Vandergrift, .....Westmoreland county.  
 Newbold, Thos. M., .....4060 Chestnut, .....Philadelphia.  
 Newcomb, C. J., .....11 Boggs ave., .....Pittsburgh.  
 Newcomer, Daniel G., ....Hazlewood City, .....  
 Newhard, Robert M., ....Fernwood, .....Delaware county.  
 Newhart, Silas H., .....3233 Norris street, .....Philadelphia.  
 Newlon, Benson C., .....Sharpsburg, .....Allegheny county.  
 Newman, G. Ernest, .....Canton, .....Bradford county.  
 Newton, Alex. B., .....Manheim & Wayne, ....Germantown.  
 Newton, Chas. R., .....Nicholson, .....Wyoming county.  
 Newton, John A., .....West Elizabeth, .....Allegheny county.  
 Newton, Robley D., .....2705 Oxford, .....Philadelphia.  
 Ney, John L., .....Shartlesville, .....Berks county.  
 Nice, Harry J., .....Lykens, .....Dauphin county.  
 Nicholas, Geo. T., .....Oil City, .....Venango county.  
 Nicholson, John B., .....621 Race, .....Harrisburg.  
 Nickerson, Howard A., ..2620 Laurens street, ....Philadelphia.  
 Nick, Chas. W., .....2404 Peach, .....Erie.  
 Nick, Frederick, .....1102 State, .....Erie.  
 Nicklas, David E., .....547 N. 12th, .....Philadelphia.  
 Nickum, Elwood G., .....29 Maple, .....Bethlehem.  
 Nicoud, Henry E., Jr., ...5th & Pine, .....Philadelphia.  
 Niece, Fred. E., .....1602 Dickson ave., .....Scranton.  
 Nisbet, Wm. W., .....77 Washington ave., ....Pittsburgh.  
 Nixon, Robert B., Jr., ....1707 N. 22d, .....Philadelphia.  
 Nixon, Simeon, Jr., .....1701 Penn ave., .....Pittsburgh.  
 Noaker, Harry O., .....Milton, .....Northumberland county.  
 Nolte, Henry A., .....162 N. 8th, .....Philadelphia.  
 Nolte, Henry R., .....12th & Christian, .....Philadelphia.  
 Noon, Edward J., .....944 N. 2d., .....Philadelphia.  
 Norman, Thos., Jr., .....Hites, .....Allegheny county.  
 Normandle, Henry W., ..Washington, .....Washington county.  
 Nourse, Chas. F., .....Centre ave. & Erin st., ..Pittsburgh.  
 Nowlin, Samuel F., .....Greensburg, .....Westmoreland county.  
 Nunemacher, A. W., .....3d & North, .....Harrisburg.  
 Nye, Hiram, .....Enon Valley, .....Lawrence county.  
 Oberholtzer, Chas. H., ...Phoenixville, .....Chester county.  
 Obley, Henry A., .....West Newton, .....Westmoreland county.  
 Ochse, Geo. H., .....5th & Jefferson, .....Philadelphia.  
 O'Donnel, David H., .....York, .....York county.  
 O'Donnel, Geo. H., .....Scranton, .....Lackawanna county.  
 O'Donnel, Timothy F., ...Parsons, .....Luzerne county.  
 Oellig, Harry W., .....Woodbury, .....Bedford county.  
 Oerter, Albert E., .....2050 Vine, .....Philadelphia.  
 Oetinger, Albert, .....967 N. 5th, .....Philadelphia.  
 Ogilby, Wm., .....1839 Chestnut, .....Philadelphia.  
 Ogle, Joseph N., .....Oakdale, .....  
 Oglevee, Ferris E., .....Vanderbilt, .....Fayette county.  
 Oglevee, Wm. H., .....323 Webster ave., .....Pittsburgh.  
 Ohall, Irwin E., .....25 Montgomery ave., ....Allegheny.  
 O'Keefe, S. C., .....1232 Penn ave., .....Pittsburgh.  
 O'Keefe, W. F. H., .....1232 Penn ave., .....Pittsburgh.  
 Oliphant, Louis, .....9th & Callowhill, .....Philadelphia.

Ople, Ralph R., .....5165 Jefferson, .....Philadelphia.  
 Orth, Fredk. C., .....Holmesburg, .....Philadelphia.  
 Osborn, Thos., Jr., .....Lundys Lane, .....Erie county.  
 Osborne, Albert E., .....West Chester, .....Chester county.  
 Osborne, Melmoth M., ....Ashbourne, .....  
 Osman, Joseph R., .....Bristol, .....Bucks county.  
 Osterlund, Otto W., .....5011 Beaumont, .....Philadelphia.  
 Ott, Chas. W., .....801 W. Huntingdon, .....Philadelphia.  
 Ott, Emile, .....5th & Pine, .....Philadelphia.  
 Ott, Geo. A., .....Bangor, .....Northampton county.  
 Ott, Peter G., .....Bangor, .....Northampton county.  
 Ottinger, Franklin, .....Parker City, .....Armstrong county.  
 Ottinger, James J., .....20th & Spruce, .....Philadelphia.  
 Ouram, Chas., .....668 N. 15th, .....Philadelphia.  
 Ousey, Samuel B., .....Adamsford, .....  
 Outman, W. H., .....Westfield, .....Tloga county.  
 Outwater, Harry E., .....Susquehanna, .....Susquehanna county.  
 Over, Byron, .....14 Berlin street, .....Pittsburgh.  
 Over, Edwin W., .....Lincoln ave., & Atwell, . Pittsburgh.  
 Owen, Harry P., .....Toughkenamon, .....Chester county.  
 Owens, Wm. P., .....Tyrone, .....Blair county.  
 Owsley, John C., .....Sharon, .....Mercer county.  
 Pachall, Theo., Jr., .....1501 Locust, .....Philadelphia.  
 Paff, Wm., .....1400 5th ave., .....Beaver Falls.  
 Page, Edward L., .....1400 Spruce, .....Philadelphia.  
 Painter, Albra W., .....Muncy, .....Wyoming county.  
 Painter, Thos., .....Muncy, .....Wyoming county.  
 Paisley, Geo. S., .....New Castle, .....Lawrence county.  
 Paisley, Winfield S., .....New Castle, .....Lawrence county.  
 Palmer, Chas. W., .....New Hope, .....Bucks county.  
 Palmer, Merritt T., .....Brockwayville, .....Jefferson county.  
 Paris, Edgar P., .....5400 Germantown ave., ..Philadelphia.  
 Park, Leon N., .....Marion Centre, .....Indiana county.  
 Park, Robert A., .....Ridgway, .....Elk county.  
 Parker, A. H., .....31 McClure ave., .....Allegheny county.  
 Parker, John J., .....2328 E. Norris, .....Philadelphia.  
 Parks, J. H., .....Leechburg, .....Armstrong county.  
 Parratt, Eugene X., .....229 N. Camac, .....Philadelphia.  
 Parrish, C. M., .....Bellefonte, .....Centre county.  
 Parrish, Frank J., Jr., ...Gallitzin, .....Cambria county.  
 Parry, Edward, .....2714 Garfield ave., .....Philadelphia.  
 Parry, H. B., .....111 E. King, .....Lancaster county.  
 Parse, Andrew C., .....1509 Gratz, .....Philadelphia.  
 Parse, Merritt, .....1925 S. 11th, .....Philadelphia.  
 Parsons, Alonzo W., .....713 Callowhill, .....Philadelphia.  
 Parsons, Geo. L., .....2407 Fairmount ave., .....Philadelphia.  
 Parsons, Wm. H., .....Knoxville, .....Allegheny county.  
 Parton, Geo. P., .....250 Mifflin ave., .....Scranton.  
 Pasold, Julius M., .....2600 Lehigh ave., .....Philadelphia.  
 Patrick, Elmer A., .....Sharpsburg, .....Allegheny county.  
 Patrick, Wm. S., .....Hancock's Bridge, .....New Jersey.  
 Patten, Edwin W., .....2107 Peach, .....Erie.  
 Patterson, James I., .....Mars, .....

Patterson, James L., .....21st & Ridge ave., .....Philadelphia.  
 Patterson, John A., .....Washington, .....Washington county.  
 Patterson, Wm. B., .....114 Market, .....Philadelphia.  
 Patterson, Wm. F. D., ..Wilksburg, .....  
 Patton, David B., .....Fayette City, .....Fayette county.  
 Patton, John F., .....273 W. Market, .....York.  
 Patton, John P., .....127 S. 4th street, .....Philadelphia.  
 Paules, John L., .....Homestead, .....Allegheny county.  
 Pauling, Wm. John, .....39 E. Market, .....Wilkes-Barre.  
 Paullin, Geo. L., .....2407 Fairmount ave., ....Philadelphia.  
 Pauly, John A., .....Transfer, .....Mercer county.  
 Pauly, Joseph C., .....Transfer, .....Mercer county.  
 Pauly, M. E., .....Transfer, .....Mercer county.  
 Pauly, Wm. F., .....Apollo, .....  
 Paxson, Elmer M., .....2700 Ridge ave., .....Philadelphia.  
 Peabody, Wm. L., .....1336 Green, .....Philadelphia.  
 Peacock, Josiah C., .....2212 N. 9th, .....Philadelphia.  
 Pealer, Chas. E., .....Dushore, .....Sullivan county.  
 Pearce, James A., .....Avonmore, .....Westmoreland county.  
 Pearce, John R., .....Avonmore, .....Westmoreland county.  
 Pearce, Samuel R., .....1106 Chestnut, .....Philadelphia.  
 Pechin, Edward V., ....412 S. 13th, .....Philadelphia.  
 Pechin, Jesse W., .....1301 Columbia ave., .....Philadelphia.  
 Pechin, Wm. J., .....20th & Columbia ave., ..Philadelphia.  
 Pechmann, Wm., .....Marcus Hook, .....  
 Peck, Aulay W., .....906 S. 49th, .....Philadelphia.  
 Peck, Geo. W., .....Grand Valley, .....Warren county.  
 Peck, Jesse L., .....W. Pittston, .....Luzerne county.  
 Peeccock, Geo. K., .....Kittanning, .....Armstrong county.  
 Peiffer, Chas. O., .....2542 Richmond, .....Philadelphia.  
 Peissahkovitch, Marcus,..770 Passyunk ave., .....Philadelphia.  
 Peltz, G. M. D., .....716 N. 15th, .....Philadelphia.  
 Pendell, Frank E., .....Sheridanville, .....  
 Pennock, Edward, .....Oxford, .....Chester county.  
 Pennypacker, Nathan, ...5th & Callowhill, .....Philadelphia.  
 Pentz, Frank A., .....3 Coleman street, .....Allegheny.  
 Perlman, Bernhard, .....3520 Germantown ave., ..Philadelphia.  
 Perrin, Elizabeth H., .....Carnegie, .....Cambria county.  
 Perrin, James M., .....Carnegie, .....Cambria county.  
 Perry, Wm. A., .....Ridgewood ave., .....Allegheny.  
 Perse, Wm. P., .....Plymouth, .....Luzerne county.  
 Pershing, Frank R., .....Pottsville, .....Schuylkill county  
 Peters, David A., .....Steelton, .....Dauphin county.  
 Peters, Henry E., .....639 Hamilton, .....Allentown.  
 Peters, Joel M., .....Albion, .....  
 Peters, R. C., .....23 S. 9th, .....Allentown.  
 Petty-John, Wm. Q., .....16th & Race, .....Philadelphia.  
 Petty, Wm., .....Wilkes-Barre, .....Luzerne county.  
 Pfaffin, Adolph R., .....Shippensburg, .....Cumberland county.  
 Pflieger, Adam Wm., ....2649 Germantown ave., ..Philadelphia.  
 Pflieger, Ellwood K., .....2123 Mt. Vernon, .....Philadelphia.  
 Pfouts, Wm. C., .....132 W. State, .....Harrisburg.  
 Pfoutz, Jacob W., .....600 N. Prince, .....Lancaster.



Pfromm, Adam, .....333 S. 2d, .....Philadelphia.  
 Phelps, D. G., .....E. Smithfield, .....Bradford.  
 Phillips, Asa L., .....Warren, .....Warren county.  
 Phillips, Chas. S., .....Myerstown, .....Lebanon county.  
 Phillips, Geo. W., .....301 N. 13th, .....Philadelphia.  
 Phillips, Hugh, .....Glenfield, .....Allegheny county.  
 Phillips, John E., .....Titusville, .....Crawford county.  
 Phillips, Joseph W., .....Danville, .....Montour county.  
 Phillips, Lehman B., .....1041 S. 3d, .....Philadelphia.  
 Pichel, Gustav, .....630 Adams ave., .....Scranton.  
 Pier, Walter B., .....Duryea, .....Luzerne county.  
 Pierce, Herman J., .....Troy, .....Bradford county.  
 Pierce, Wm. A., .....West Chester, .....Chester county.  
 Pilgrim, John W., .....19th & Diamond, .....Philadelphia.  
 Pinchback, P. N., .....3401 Walnut, .....Philadelphia.  
 Pinter, Edmund, .....964 N. 8th, .....Philadelphia.  
 Piper, Austin C., .....Coal Centre, .....Washington county.  
 Piper, Cary, .....Charleroi, .....Washington county.  
 Pitzer, Edgar S., .....Martinsburg, .....  
 Platt, Edwin M., .....36th & Sansom, .....Philadelphia.  
 Pleibel, C. F. W., .....2480 Frankford ave., ....Philadelphia.  
 Pleibel, Eugene T., .....2480 Frankford ave., ....Philadelphia.  
 Plough, Wm. Henry, .....4th ave. & Smithfield, ....Pittsburgh.  
 Podolski, L. A., .....6th & Poplar, .....Philadelphia.  
 Poley, Warren H., .....Germantown, .....Philadelphia.  
 Pollord, Augustus T., ....239 S. 11th, .....Philadelphia.  
 Pollock, Robert B., Jr., ..2210 S. Broad, .....Philadelphia.  
 Pooler, Geo. W., .....Greensburg, .....Westmoreland county.  
 Porr, John L., .....Steelton, .....Dauphin county.  
 Porter, Calvin, .....Alexandria, .....Huntingdon county.  
 Porter, Clark B., .....Towanda, .....Bradford county.  
 Porter, Clifford C., M. D., Greensburg, .....Westmoreland county.  
 Porter, Fred. K., .....4701 5th ave., .....Pittsburgh.  
 Porter, Henry C., .....Towanda, .....Bradford county.  
 Porter, James B., .....62 Federal, .....Allegheny.  
 Porter, J. Elmer, .....Pottstown, .....Montgomery county.  
 Porter, John Morris, .....2242 Turner, .....Philadelphia.  
 Porter, M. Arthur, .....Canton, .....Bradford county.  
 Porter, Moses E., .....Dawson, .....Fayette county.  
 Porter, Samuel E., .....Vanderbilt, .....Fayette county.  
 Porter, Samuel H., .....Pottstown, .....Montgomery county.  
 Porter, Wm. T., .....Phoenixville, .....Chester county.  
 Portser, Chas. Henry, ...1400 Spruce, .....Philadelphia.  
 Post, Edward M., .....707 Vine, .....Philadelphia.  
 Poth, Adolph H., .....12th & Carson, .....Pittsburgh.  
 Pottelger, Wm. F., .....4th & Spruce, .....Reading.  
 Potter, John D., .....81 Arlington ave., .....Pittsburgh.  
 Potter, Robert J., .....81 Arlington ave., .....Pittsburgh.  
 Potts, David G., .....24 S. 2d, .....Philadelphia.  
 Potts, Geo. C., .....1513 N. 2d, .....Harrisburg.  
 Potts, Thos. H., .....1747 N. 17th, .....Philadelphia.  
 Potts, W. J., .....Ligonier, .....Westmoreland county.  
 Povinsky, Chas., .....Shenandoah, .....Schuylkill county.

Powell, Thos. P., .....Greenville, .....Mercer county.  
 Powell, Wm. H., .....Columbia, .....Lancaster county.  
 Power, Edward S., .....219 Market, .....Philadelphia.  
 Praul, Walter F., .....2425 Turner, .....Philadelphia.  
 Preston, David, .....9th & Lombard, .....Philadelphia.  
 Preston, Gilbert K., .....511 S. 9th, .....Philadelphia.  
 Preuss, John, .....1726 Dickinson, .....Philadelphia.  
 Price, Elmer E., .....Edinboro, .....Erie county.  
 Price, Thos. H., .....Bridesburg, .....Philadelphia.  
 Price, Wm. C., .....Pittston, .....Luzerne county.  
 Prickitt, Frank W., .....Rosemont, .....Montgomery county.  
 Prieson, Adolph, .....Lock Haven, .....Clinton county.  
 Pringle, A. A., .....South Fork, .....Cambria county.  
 Pritchard, Benj. E., .....McKeesport, .....Allegheny county.  
 Procter, Wallace, .....19th & Pine, .....Philadelphia.  
 Proper, Walter J., .....Pleasantville, .....Venango county.  
 Prout, Jacob S., .....Wiconisco, .....Dauphin county.  
 Prowell, Wm. R., .....Steelton, .....Dauphin county.  
 Pryor, Frank C., .....Morrisville, .....  
 Pryor, Wm. B. F., .....Langhorne, .....Bucks county.  
 Pulsifer, James P., .....937 Spruce, .....Philadelphia.  
 Purdon, Thos. A., .....Dalton, .....Lackawanna county.  
 Purdue, Frank T., .....775 S. 8th, .....Philadelphia.  
 Purnell, Howard, .....Ansonville, .....Clearfield county.  
 Pursell, Howard, .....Bristol, .....Bucks county.  
 Pursell, Stacy B., .....Bristol, .....Bucks county.  
 Purvis, Samuel G., .....278 Rebecca, .....Allegheny.  
 Pyle, Robert L., .....London Grove, .....Chester.  
 Quail, Chas. E., .....Auburn, .....Schuylkill county.  
 Qualintance, Rebecca D.,...Churchtown, .....Lancaster county.  
 Quick, Wm. M., .....New Castle, .....Lawrence county.  
 Quigley, T. V. S., .....Littlestown, .....Adams county.  
 Quine, John H., .....1238 S. Broad, .....Philadelphia.  
 Quinn, Francis D., .....Johnsonburg, .....Elk county.  
 Quinn, John A., .....Lansford, .....Carbon county.  
 Quinn, Lemuel A., .....Du Bois, .....Clearfield county.  
 Quinn, Wallace C., .....Crenshaw, .....Jefferson county.  
 Rabenan, Arwed G., .....5th & Spruce, .....Philadelphia.  
 Rabenan, J. Herman, ....112 N. Centre, .....Pottsville.  
 Radefeld, Fredk., .....501 S. 4th, .....Philadelphia.  
 Radefeld, Robert H., .....501 S. 4th, .....Philadelphia.  
 Raessler, Joel G., .....Mt. Carmel, .....Northumberland county.  
 Raker, Fredk., D., .....Shamokin, .....Northumberland county.  
 Raker, John W., .....Bordentown, .....New Jersey.  
 Ralston, Geo. F., .....E. Clearfield & Thompson, Philadelphia.  
 Ralston, John C., .....Wilkinsburg, .....Allegheny county.  
 Ramsey, Chas. C., .....Market & Parrish, .....Philadelphia.  
 Ramsey, James H., .....West Bridgewater, .....Beaver county.  
 Ranck, David W., .....4034 Germantown ave., ...Philadelphia.  
 Randal, Harry L., .....1122 Moyamensing ave.,...Philadelphia.  
 Ramey, Willis, .....New Castle, .....Lawrence county.  
 Rankin, Edgar A., .....Conneaut Lake, .....Crawford county.  
 Rankin, Geo. T., .....Linesville, .....Crawford county.

Rankin, Harvey, ..... Elderton, ..... Armstrong county.  
 Rankin, James L., ..... 5100 Penn ave., ..... Pittsburgh.  
 Rankin, James R., ..... Muncy, ..... Lycoming county.  
 Rankin, Michael M., ..... Brockwayville, ..... Jefferson county.  
 Ranney, Cassius W., ..... New Castle, ..... Lawrence county.  
 Ranney, Robert B., ..... New Castle, ..... Lawrence county.  
 Rapp, Fred., ..... 1247 N. 10th, ..... Philadelphia.  
 Raser, Geo. P., ..... 429 Arch, ..... Philadelphia.  
 Raser, John B., ..... 154 N. 6th, ..... Reading.  
 Rathmell, Geo. M., ..... Brownsville, ..... Indiana county.  
 Rau, Eugene A., ..... Bethlehem, ..... Northampton county.  
 Rau, Robert, ..... Bethlehem, ..... Northampton county.  
 Raudenbush, Chas. A., .. 11 S. 5th, ..... Reading.  
 Raymer, Wm., ..... Beaver Falls, ..... Beaver county.  
 Rea, James L., ..... 1560 Dickson ave., ..... Scranton.  
 Rea, John, ..... Doylestown, ..... Bucks county.  
 Read, Chas. C., ..... Huntingdon, ..... Huntingdon county.  
 Read, Fredk. B., ..... Osceola Mills, ..... Clearfield county.  
 Read, Harry W., ..... Huntingdon, ..... Huntingdon county.  
 Read, Ralph M., ..... Osceola Mills, ..... Clearfield county.  
 Read, Thos. R., ..... Huntingdon, ..... Huntingdon county.  
 Reading, Albert J., ..... Hathoro, ..... Montgomery county.  
 Reading, Joel S., ..... 3952 Lancaster ave., ..... Philadelphia.  
 Reading, Wm. V., ..... Norristown, ..... Montgomery county.  
 Reagan, Robert S., ..... Broad Ford, ..... Fayette county.  
 Reavley, Geo. D., ..... 918 Parade, ..... Erie.  
 Rectenwald, Daniel L., .. 89 Washington ave., ..... Pittsburgh.  
 Rectenwald, Louis A., .. Mt. Oliver, .....  
 Redeker, J. Wm., ..... Bloomsburg, ..... Columbia county.  
 Redick, John C., ..... Butler, ..... Butler county.  
 Redington, Robert F., .. Troy, ..... Bradford county.  
 Redner, T. R., ..... 5445 Germantown ave., .. Philadelphia.  
 Redsecker, Jacob H., ..... Lebanon, ..... Lebanon county.  
 Reed, Arthur C., ..... 1617 8th ave., ..... Altoona.  
 Reed, Arthur B., ..... 153 W. Huntingdon, ..... Philadelphia.  
 Reed, Chas. E., ..... Zelienople, ..... Butler county.  
 Reed, Fredk. M., ..... Chester, ..... Delaware county.  
 Reed, James P., ..... Braddock, ..... Allegheny county.  
 Reed, Joseph H., ..... 302 State, ..... Sharon.  
 Reed, Kenneth A., ..... Gallitzin, ..... Cambria county.  
 Reed, Raymond E., ..... 1306 N. 3d, ..... Harrisburg.  
 Reed, R. Duane, ..... Honesdale, ..... Wayne county.  
 Reed, Willoughby H., .... Marshall & Astor, ..... Norristown.  
 Reed, Wm. H., ..... Camden, ..... Allegheny county.  
 Reeder, Milton T., ..... Millersville, ..... Lancaster county.  
 Reemsnyder, Henry G., .. Ephrata, ..... Lancaster county.  
 Reese, David J., ..... 17th & Huntingdon, ..... Philadelphia.  
 Reese, John B., ..... Mahanoy City, ..... Schuylkill county.  
 Reese, John W., ..... Taylor, ..... Lackawanna county.  
 Reese, Lewis, ..... 1910 Sansom, ..... Philadelphia.  
 Reeser, Wm. Howard, .... 14th & Cotton, ..... Reading.  
 Reeve, James W., ..... 1106 Chestnut, ..... Philadelphia.  
 Regar, Daniel S., ..... 2137 Master, ..... Philadelphia.

Regar, W. S., .....1201 Spruce, .....Philadelphia.  
 Rehbein, Louis W., .....2800 Germantown ave., ..Philadelphia.  
 Rehfus, Chas., .....708 Pine, .....Philadelphia.  
 Reice, Wm., .....3201 Powelton ave., .....Philadelphia.  
 Reich, Solomon M., .....6223 Penn ave., .....Pittsburgh.  
 Reichard, A. A., .....Sharpsville, .....Mercer county.  
 Reichenbacker, F. C., ....Honesdale, .....Wayne county.  
 Reichert, Hannah A., ....Kittanning, .....Armstrong county.  
 Reichert, Henry B., ....Kittanning, .....Armstrong county.  
 Reichert, John E., .....Kittanning, .....Armstrong county.  
 Reid, John C., .....Clarion, .....Clarion county.  
 Reider, Edwin S., .....5 E. Market, .....Williamsport.  
 Reidenbach, Elmer A., ..34th & Pine, .....Philadelphia.  
 Reif, Ernest, .....1632 N. 3d, .....Philadelphia.  
 Reimann, Louis P., .....5th & Poplar, .....Philadelphia.  
 Reimensnyder, M. V., ....4th & Market, .....Sunbury.  
 Reinhold, John, Jr., ....Erie, .....Erie county.  
 Reisert, Wm., .....1717 S. 8th, .....Philadelphia.  
 Reizenstein, Albert G., ...Lebanon, .....Lebanon county.  
 Remig, John H., .....1201 Christian, .....Philadelphia.  
 Remington, Jos. P., .....1832 Pine, .....Philadelphia.  
 Remington, S. J., .....13 S. 13th, .....Philadelphia.  
 Remley, Chas. C., .....1840 Christian, .....Philadelphia.  
 Renn, Philip H., .....Sunbury, .....Northumberland county.  
 Renneckar, Clarence E., ..Sharon, .....Mercer county.  
 Renniman, Wm. J., ....Avoco, .....Luzerne county.  
 Renshaw, Thos. W., ....Summit Hill, .....Carbon county.  
 Rentschler, Chas., Jr., ...348 Penn, .....Reading.  
 Rentzel, Elmer E., .....Manayunk, .....Philadelphia.  
 Reuss, Wm., .....833 S. 2d, .....Philadelphia.  
 Reuting, Theo. W., .....Titusville, .....Crawford county.  
 Rewalt, John W., .....Middletown, .....Dauphin county.  
 Reynolds, Avery W., ....Carbondale, .....Lackawanna county.  
 Reynolds, Clarence H., ..231 N. 12th, .....Philadelphia.  
 Reynolds, John B., .....2000 N. Front, .....Philadelphia.  
 Reynolds, J. M. C., .....Glyde, .....  
 Reynolds, May, .....801 S. Broad, .....Philadelphia.  
 Reynolds, Samuel, .....Reynoldsville, .....Jefferson county.  
 Reynolds, Wm. D., .....Delano, .....Schuylkill county.  
 Rhoades, Stephen H., ....Pittston, .....Luzerne county.  
 Rhoades, Wm. S., .....Houtzdale, .....Clearfield county.  
 Rhoads, Edward E., ....Mt. Carmel, .....Northumberland county.  
 Rhodes, Chas. R., .....Hyndman, .....  
 Rhodes, E. M., .....Mt. Union, .....Huntingdon county.  
 Rhodes, W. R., .....Corry, .....Erie county.  
 Rice, Fred. W., .....Rome, .....Bradford county.  
 Rice, Geo. L., .....McSherrystown, .....Adams county.  
 Rice, Willard M., Jr., ....6519 Germantown ave., ..Philadelphia.  
 Rice, Wm., .....Rome, .....Bradford county.  
 Richards, Alfred N., ....Easton, .....Northampton county.  
 Richards, Chas., .....North East, .....Erie county.  
 Richards, Davis B., .....10th & Montgomery ave., Philadelphia.  
 Richards, Geo. W., .....Duquesne, .....Allegheny county.

Richards, Hannah E., .... Alden Station, ..... Luzerne county.  
 Richards, Miles, .... McKeesport, ..... Allegheny county.  
 Richardson, Alick G., .... New Castle, ..... Lawrence county.  
 Richardson, Harry, .... Girardville, ..... Erie county.  
 Richardson, James, .... 1300 S. 5th, ..... Philadelphia.  
 Richardson, James H., .. 20th & South, ..... Philadelphia.  
 Richardson, Neafie, .... th & Diamond, ..... Philadelphia.  
 Richart, Frank E., .... Towanda, ..... Bradford county.  
 Riche, Walter A., .... Shamokin, ..... Northumberland county.  
 Richey, Elisha C., .... Latrobe, ..... Westmoreland county.  
 Richman, Edward M., .... 2030 Brandywine, ..... Philadelphia.  
 Richter, Gustave A., .... 801 S. Front, ..... Philadelphia.  
 Ricker, Wm. H., .... 19th & Dickinson, ..... Philadelphia.  
 Rickert, Wm. M., .... 3254 N. 15th, ..... Philadelphia.  
 Ricketts, Clarence E., .... Kane, ..... McKean county.  
 Ridgway, Chas. A., .... Hydetown, ..... Crawford county.  
 Ridgway, Wm. Fredk., .. 36th & Sansom, ..... Philadelphia.  
 Ridington, Wm. A., .... Lansdale, ..... Montgomery county  
 Rldpath, John W., .... Jenkintown, ..... Montgomery county  
 Rieben, Ernest, .... 2801 Girard ave., ..... Philadelphia.  
 Riedenauer, F. P., .... Main & Cheltenham ave., .... Germantown.  
 Riegel, Chas. H., .... 58th & Vine, ..... Philadelphia.  
 Riegel, Samuel J., .... Front & Lehigh ave., ... Philadelphia.  
 Riesenman, John, .... Franklin, ..... Venango county.  
 Riesenman, Joseph, .... Franklin, ..... Venango county.  
 Riggs, Leander, .... Elizabeth, ..... Allegheny county.  
 Rihn, Edward J., .... 64 Chestnut, ..... Allegheny.  
 Riley, C. T., .... Pulaski, ..... Lawrence county.  
 Ringer, Chas. E., .... 4730 Liberty ave., ..... Pittsburgh.  
 Ringer, Louis, .... 894 N. 6th, ..... Philadelphia.  
 Ringler, Geo. P., .... Bloomsburg, ..... Columbia county.  
 Rinker, Henry P., .... 35th & Queen Lane, .... Philadelphia.  
 Rinker, Wm. H., .... 2108 N. 8th, ..... Philadelphia.  
 Riott, Lawrence F., .... 62 Washington ave., .... Pittsburgh.  
 Rishell, John D., .... 1130 Walnut, ..... Philadelphia.  
 Rishton, Wm. S., .... Bloomsburg, ..... Columbia county.  
 Rising, John H., .... 31 McClure ave., ..... Allegheny.  
 Risley, John C., Jr., .... 6th & Buttonwood, ..... Philadelphia.  
 Ritchey, V. H., .... Carlisle, ..... Cumberland county.  
 Ritter, F. W., .... 1444 Franklin, ..... Philadelphia.  
 Ritter, Wm. J., .... 1224 Shackamaxon, ..... Philadelphia.  
 Ritz, Chas. M., .... Lewistown, ..... Mifflin county.  
 Ritz, Chas. A., .... 4806 Chester ave., ..... Philadelphia.  
 Roach, Wm. H., .... Driftwood, ..... Cameron county.  
 Robert, Victor, .... 1109 S. 47th, ..... Philadelphia.  
 Roberts, Alma A., .... Union City, ..... Erie county.  
 Roberts, Chas. H., .... 4343 Frankford ave., .... Philadelphia.  
 Roberts, Chas. H. B., .... 1307 N. 24th, ..... Philadelphia.  
 Roberts, Chas. J., .... Malvern, ..... Chester county.  
 Roberts, Geo. L., .... Washington, ..... Washington county  
 Roberts, Geo. W., .... Washington, ..... Washington county.  
 Roberts, Harry W., .... 310 York ave., ..... W. Pittston.  
 Roberts, Hugh M., .... Jackson, ..... Susquehanna county.

Roberts, James W., .....5645 Rural ave., .....Pittsburgh.  
 Roberts, John K., .....Cochranton, .....Crawford county.  
 Roberts, Joseph V. C., ..4128 Market, .....Philadelphia.  
 Roberts, R. C., .....Ambler, .....Montgomery county.  
 Roberts, Ray F., .....Jackson, .....Susquehanna county.  
 Roberts, W. D., .....Washington, .....Washington county.  
 Robertson, A. E., .....436 7th ave., .....Pittsburgh.  
 Robertson, Henry E., ....3213 N. 17th, .....Philadelphia.  
 Robin, Peter, .....2401 Penn ave., .....Pittsburgh.  
 Robins, Edwin S., Jr., ..Shamokin, .....Northumberland county.  
 Robins, Howard G., ....915 Fairmount ave., ....Philadelphia.  
 Robins, Mrs. Kate E., ....Shamokin, .....Northumberland county.  
 Robinson, Bert B., .....Oswago, .....Potter county.  
 Robinson, David S., .....Dallas & Forbes ave., ...Pittsburgh.  
 Robinson, D. Fred. ....Brownsville, .....Fayette county.  
 Robinson, Harry H., ....Saltsburg, .....Indiana county.  
 Robinson, H. W., .....Brownsville, .....Fayette county.  
 Robinson, Joseph, .....967 N. 2d, .....Philadelphia.  
 Robinson, Robert, .....East Brady, .....Clarion county.  
 Robinson, Wm. C., .....Saltsburg, .....Indiana county.  
 Robinson, Wm. H., .....Pottsville, .....Schuylkill county.  
 Rocap, Wm. A., .....Olney, 22d ward, .....Philadelphia.  
 Roche, Edward M., .....4028 Eaglefield street, ...Philadelphia.  
 Roche, Wm. F., .....McVeytown, .....  
 Rock, Peter J., .....2963 Kensington ave., ...Philadelphia.  
 Rodenmoyer, Wm. E., ....584 5th ave., .....McKeesport.  
 Rodgers, John R., .....Sterretts Gap, .....Perry county.  
 Rodgers, Wm. H., .....Mifflintown, .....Juniata county.  
 Rodman, James T., .....Hawley, .....Wayne county.  
 Roe, Edward J., .....1225 Mulberry, .....Harrisburg.  
 Roe, Wm. Grant, .....1255 Mulberry, .....Harrisburg.  
 Roedel, Wm. R., .....12 N. 5th, .....Lebanon.  
 Roeder, Jonas E., .....2604 Montgomery ave., ..Philadelphia.  
 Roessner, Benj., .....1302 Lawrence, .....Philadelphia.  
 Roessner, Frank G., .....1302 Lawrence, .....Philadelphia.  
 Rogers, Chas. A., .....Freeport, .....Armstrong county.  
 Rogers, Edward B., .....Mt. Holly, .....New Jersey.  
 Rogers, Franklin P., ....West Chester, .....Chester county.  
 Rogers, Geo. R., .....Scranton, .....Lackawanna county.  
 Rogers, John T., .....Waynesburg, .....Greene county.  
 Rogers, Oswald, .....Alden Station, .....Luzerne county.  
 Rohn, Peter S., .....23d & Dickinson, .....Philadelphia.  
 Rohrer, Geo. S., .....Kittanning, .....Armstrong county.  
 Rohrer, Howard, .....336 N. Duke, .....Lancaster.  
 Rohrer, T. M., .....Quarryville, .....Lancaster county.  
 Roland, Geo. W., .....So. Bethlehem, .....Northampton county.  
 Rolland, Geo. H., .....52d & Westminster ave., Philadelphia.  
 Rolff, Julius, .....Morrisville, .....Bucks county.  
 Rolleston, Arthur R., ....6069 Callowhill, .....Philadelphia.  
 Romburg, Frederick, ....430 N. 9th, .....Philadelphia.  
 Rooney, James P., .....32 Swallow, .....Plttston.  
 Root, Wm. G., .....6342 Haverford ave., ....Philadelphia.  
 Rosboro, Frank H., .....Dawson, .....Fayette county.

Rose, Frank, .....1833 Callowhill, .....Philadelphia.  
 Rosenberger, E. S., .....7th & Germantown ave.,...Philadelphia.  
 Rosenberger, Wm. D., ...7th & Germantown ave.,...Philadelphia.  
 Rosenstock, Louis, .....3045 Grays Ferry Road, ..Philadelphia.  
 Rosenzweig, C. J., .....2200 5th ave., .....Pittsburgh.  
 Ross, Anna C., .....708 N. 5th, .....Philadelphia.  
 Ross, David H., .....2567 E. Norris, .....Philadelphia.  
 Ross, David W., .....2167 E. Cumberland st., ..Philadelphia.  
 Ross, Dell N., .....Rosemont, .....Montgomery county.  
 Ross, Eben J., .....Oxford, .....Chester county.  
 Ross, Frank B., .....Vincentown, .....New Jersey.  
 Ross, Geo. H., .....Luzerne, .....Luzerne county.  
 Ross, Geo. R., .....Lebanon, .....Lebanon county.  
 Ross, H. Frank, .....604 Arch, .....Philadelphia.  
 Ross, Hugh H., .....800 N. 13th, .....Philadelphia.  
 Ross, Jesse L., .....Waynesburg, .....Greene county.  
 Ross, Wm. H., .....North East, .....Erie county.  
 Ross, Wm. R., .....Lebanon, .....Lebanon county.  
 Rossman, Geo. A., .....Danville, .....Montour county.  
 Roth, Samuel G. J., .....154 N. 11th, .....Philadelphia.  
 Rothermel, John P., .....Lewistown, .....Mifflin county.  
 Rothrock, D. R., .....Milton, .....Northumberland county.  
 Rothrock, Marand, .....Mt. Pleasant Mills, .....Snyder county.  
 Rothwell, Walter, .....Willow Grove, .....Montgomery county.  
 Rott, Louls, .....Homestead, .....Allegheny county.  
 Rovno, Pinkas, .....724 S. 3d, .....Philadelphia.  
 Rowe, Wm. C., .....1500 S. Broad, .....Philadelphia.  
 Rowse, Edwin F., .....Homestead, .....Allegheny county.  
 Rowse, Thos. J., .....Pottsville, .....Schuylkill county.  
 Royer, G. S., .....Ephrata, .....Lancaster county.  
 Rubinstein, Louis, .....1322 Carson, .....Pittsburgh.  
 Rudolph, John M., .....565 N. 25th, .....Philadelphia.  
 Rudy, Jacob A., .....9th & Locust, .....Philadelphia.  
 Rudy, Martin, .....2 W. King street, .....Lancaster.  
 Ruegenberg, John M., ....2621 Girard ave., .....Philadelphia.  
 Ruff, Jennie H., .....Ruffs Dale, .....Westmoreland county.  
 Ruff, Lloyd H., .....Ruffs Dale, .....Westmoreland county.  
 Ruff, Quincy A., .....Ruffs Dale, .....Westmoreland county.  
 Ruff, U. Gilbert, .....Marshall & Thompson, ...Philadelphia.  
 Ruhl, Harry F., .....Manheim, .....Lancaster county.  
 Rumsey, Walter A., .....920 N. 41st, .....Philadelphia.  
 Russell, Thos. J., .....Erie, .....Erie county.  
 Rutherford, Chas. A., ....10th & Reed, .....Philadelphia.  
 Rutherford, Frank P., ...1501 Christian, .....Philadelphia.  
 Ryan, David S., .....Penn ave. & Spruce, .....Scranton.  
 Ryan, Frank G., .....145 N. 10th, .....Philadelphia.  
 Ryan, Geo. W., .....York, .....York county.  
 Ryckman, Levi M., .....Export, .....  
 Ryland, Geo. B., .....3621 5th Ave., .....Pittsburgh.  
 Rynard, Chas. W., .....1700 Wharton, .....Philadelphia.  
 Saalback, Carl, .....2128 Forbes street, .....Pittsburgh.  
 Saalback, Louis, .....431 Market, .....Pittsburgh.  
 Saalfrank, Chas. W., .....Lawndale, .....Philadelphia.



Saeger, Geo. C., .....Montoursville, .....Lycoming county.  
 Sager, E. S., .....Smithton, .....Westmoreland county.  
 Salchow, Otto H., .....North East, .....Erie county.  
 Sallada, Hunter, .....Ashland, .....Schuylkill county.  
 Sames, Joseph H., .....40th & Girard ave., .....Philadelphia.  
 Sample, Geo. W., .....3 E. Market, .....York.  
 Sainpsel, James W., .....Penns Creek, .....Snyder county.  
 Samuel, Edmund W., ....Mt. Carmel, .....Northumberland county.  
 Sanders, J. C., .....Martinsburg, .....Blair county.  
 Sanderson, Henry C., ....Scranton, .....Lackawanna county.  
 Sandles, Van Amburg, ..McKees Rocks, .....Allegheny county.  
 Sands, Frank E., .....Great Bend, .....Indiana county.  
 Sands, J. S., .....Germantown, .....Philadelphia.  
 Sandt, Geo. L., .....Brookville, .....Jefferson county.  
 Sandt, Joseph P., .....530 Northampton street, ..Easton.  
 Sartwell, Thos. L., .....Eldred, .....McKean county.  
 Sarver, Oliver C., .....Broad & Fairmount ave., Philadelphia.  
 Sauer, Albert H., .....924 East, .....Allegheny.  
 Saurer, Wm. H., .....2700 E. Allegheny ave., ..Philadelphia.  
 Sausser, Howard E., .....539 N. 11th, .....Reading.  
 Sawhill, Alex. F., .....1333 Fayette, .....Allegheny.  
 Sawhill, D. Frank, .....643 5th ave., .....Pittsburgh.  
 Sawhill, Wesley W., .....643 5th ave., .....Pittsburgh.  
 Saxton, Wm. K., .....Liberty, .....Tioga county.  
 Saybolt, Geo. H., .....2205 Emerald, .....Philadelphia.  
 Saylor, Albert R., .....Royersford, .....Montgomery county.  
 Saylor, Byron C., .....Annville, .....Lebanon county.  
 Saylor, Hattie E., .....Royersford, .....Montgomery county.  
 Scattergood, Caleb, .....235 S. 10th, .....Philadelphia.  
 Schabinger, Dr. Chas., ..11th & Brown, .....Philadelphia.  
 Schad, Harry J. G., .....Reading, .....Berks county.  
 Schad, Otto A., .....234 Ohio, .....Allegheny.  
 Schaefer, Chas. H., .....388 5th ave., .....Pittsburgh.  
 Schaefer, Emil A., .....1436 5th ave., .....Pittsburgh.  
 Schaefer, Geo., .....Lock Haven, .....Clinton county.  
 Schaeffer, Otis O., .....Middletown, .....Dauphin county.  
 Schaeffle, Clarence C., ....Lock Haven, .....Clinton county.  
 Schafer, Chas. A., .....4300 Butler, .....Pittsburgh.  
 Schaffle, S. W. W., .....3305 Hamilton, .....Philadelphia.  
 Schalch, Anthony, .....240 S. 9th, .....Reading.  
 Schamm, Daniel, Jr., ....2433 Brown, .....Philadelphia.  
 Schearer, P. W. H., .....8 S. 9th, .....Reading.  
 Scheck, Wm. S., .....Coudersport, .....Potter county.  
 Scheffler, James S., .....Pen Argyl, .....Northampton county.  
 Schenberger, Geo. E., ....3 E. Market, .....York.  
 Scheirer, Franklin B., ...402 N. 68th, .....Allentown.  
 Scheirer, Victor D., .....Swarthmore, .....Delaware county.  
 Scherer, Fred'k, .....2036 Webster ave., .....Pittsburgh.  
 Scheuhing, John B., .....1941 S. 6th, .....Philadelphia.  
 Schilling, Chas. A., .....Smithfield & Liberty, ....Pittsburgh.  
 Schilling, Edwin T., .....Braddock, .....Allegheny county.  
 Schilling, Paul C., .....2801 Penn ave., .....Pittsburgh.  
 Schindel, Harry C., .....4099 Lancaster ave., .....Philadelphia.

Schirmer, Wm. G., .....431 Market, .....Pittsburgh.  
 Schlauch, Theo. S., .....New Holland, .....Lancaster county.  
 Schlegel, E. F., .....735 S. 5th, .....Philadelphia.  
 Schlobach, C. T., .....437 Hamilton, .....Easton.  
 Schmehl, Irvin S., .....1207 Race, .....Philadelphia.  
 Schmickle, Chas. F., .....304 N. 35th, .....Philadelphia.  
 Schmidt, Adolph, .....236 5th ave., .....McKeesport.  
 Schmidt, Geo. W., .....6130 Butler, .....Pittsburgh.  
 Schmidt, Henry, .....1729 S. 2d, .....Philadelphia.  
 Schmieg, Joseph A., ....26th & York, .....Philadelphia.  
 Schminky, Allen B., .....2758 N. 15th, .....Philadelphia.  
 Schneider, K. C. T., .....1607 Vine, .....Philadelphia.  
 Schnell, J. A., .....160 Robinson street, .....Allegheny.  
 Schoales, Marcus A., ....2211 Bridge, .....Franklin.  
 Schock, Fredk. A., .....12th & Wolf, .....Philadelphia.  
 Schoenberger, August, ...Ashland, .....Schuylkill county.  
 Schofield, A. C., .....15th & Susquehanna ave., Philadelphia.  
 Scholl, B. Frank, .....1711 N. 25th, .....Philadelphia.  
 Schools, Geo. W., .....365 N. 9th, .....Lebanon.  
 Schoonmaker, Irving R.,...Sayre, .....Bradford county.  
 Schott, Arthur C. V., .....804 Duquesne Way, .....Pittsburgh.  
 Schowalter, Joseph B., ..Chicora, .....Butler county.  
 Schrack, Robert F., .....1500 N. 22d, .....Philadelphia.  
 Schreiber, John D., .....210 N. 7th, .....Allentown.  
 Schreiber, Philip H., ....3 E. Market, .....York.  
 Schroeder, Luther J., ....Columbia, .....Lancaster county.  
 Schrum, Chas. A., .....Du Bois, .....Clearfield county.  
 Schuchmann, Wm., .....1860 Wylie ave., .....Pittsburgh.  
 Schuenemann, Otto, .....3029 York street, .....Philadelphia.  
 Schuetz, Chas. W., .....Sharpsburg, .....Allegheny county.  
 Schultz, John H., .....Tremont, .....Schuylkill county.  
 Schumann, A. F., .....2502 N. 18th, .....Philadelphia.  
 Schuster, Geo. R. W., ....2006 Turner, .....Philadelphia.  
 Schwaemmle, F. P., .....2574 Frankford ave., .....Philadelphia.  
 Schwartz, Chas. G., .....6201 Penn ave., .....Pittsburgh.  
 Schwartz, Fred'k, .....3600 Richmond, .....Philadelphia.  
 Schwartz, L. L., .....Brownsville, .....Fayette county.  
 Schweiter, Henry B., ....6742 Frankstown ave., ...Pittsburgh.  
 Schweppe, Harry L., ....New Brighton, .....Beaver county.  
 Scorer, M. H., .....316 8th ave., .....Homestead.  
 Scott, Geo. C., .....Franklin & Columbia av., Philadelphia.  
 Scott, Joel F., .....Coal Valley, .....Allegheny county.  
 Scott, John C., .....2700 E. Allegheny ave., ..Philadelphia.  
 Scott, J. Harry, .....Lambert & Susqueh'a av., Philadelphia.  
 Scott, J. P. E., .....108 Richmond, .....Philadelphia.  
 Scott, Kent C., .....Monongahela, .....Washington county.  
 Scott, Levi, .....2902 Richmond, .....Philadelphia.  
 Scott, Robert B., .....1200 Poplar, .....Philadelphia.  
 Scott, Theo. W., .....8th & Walnut, .....Philadelphia.  
 Scott, Thornton F. B., ..3952 Lancaster ave., .....Philadelphia.  
 Scull, James I., .....764 W. 4th, .....Williamsport.  
 Scureman, Joseph B., ....Nanticoke, .....Luzerne county.  
 Seabold, Wm. S., .....Annville, .....Lebanon county.

Seary, Wm. N., .....318 Bainbridge, .....Philadelphia.  
 Sechler, Harmon M., .....201 Mill, .....Danville.  
 Sedlmayr, Erwin, .....11 E. Lehigh street, .....Easton.  
 Seebold, John E., .....Carlisle, .....Cumberland county.  
 Seeler, Andrew J., .....1941 Spring Garden, .....Philadelphia.  
 Seeley, Hosea F., .....2407 Fairmount ave., .....Philadelphia.  
 Seely, M. B., .....Nelson, .....Tioga county.  
 Seiberling, J. D., .....22d & Christian, .....Philadelphia.  
 Seidel, Chas. T. W., .....Worth, .....Mercer county.  
 Seipel, Ledy, .....4th & Poplar, .....Philadelphia.  
 Selss, R. S., .....Littlestown, .....Adams county.  
 Seither, Chas. A., .....138 Sumac, .....Philadelphia.  
 Seltz, Frederick, .....22d & Vine, .....Philadelphia.  
 Seltz, James E., .....Glen Rock, .....  
 Seltz, John A., .....Henry Clay, .....Delaware.  
 Sell, Jacob, .....Greensburg, .....Westmoreland county.  
 Sellen, Edward C., .....1203 S. 11th, .....Philadelphia.  
 Sellers, Elmer J., .....Kutztown, .....Bucks county.  
 Sellers, S. M., .....8th ave & 12th street, ....Altoona.  
 Sellers, Wm. H., .....133 N. 11th, .....Philadelphia.  
 Seltzer, Chas. J., .....Parkesburg, .....Chester county.  
 Semmel, Frank P., Jr., ..Leighton, .....Carbon county.  
 Semple, John, .....1201 W. 3d, .....Chester county.  
 Semple, Joseph G., .....817 Ferry, .....Easton.  
 Senecal, E. W., .....433 Ferry street, .....Easton.  
 Serfass, A. L., .....Easton, .....Northampton county.  
 Sergeant, Jackson, .....West Chester, .....Chester county.  
 Server, Oliver B., .....Passy'k av. & Cathar'e st., Philadelphia.  
 Service, Alex. M., .....125 Market, .....Philadelphia.  
 Settle, Peter S., .....4132 Salem, .....Frankford.  
 Seubort, Chas. A., .....227 N. 8th, .....Philadelphia.  
 Seville, David W., .....Bellevue, .....Allegheny county.  
 Shaeffer, Wm. J., .....1427 Susquehanna ave., ..Philadelphia.  
 Shafer, Erwin C., .....Milestown, .....Philadelphia.  
 Shaff, Oliver B., .....Irwin, .....Westmoreland county.  
 Shaffer, Chas. H., .....Elizabeth, .....Allegheny county.  
 Shallcross, Wm. G., .....1828 Frankford ave., ....Philadelphia.  
 Shaner, Jacob D., .....Suterville, .....Westmoreland county.  
 Shaner, James E., .....Greensburg, .....Westmoreland county.  
 Shannon, Samuel C., .....4055 Girard ave., .....Philadelphia.  
 Shannon, Wm. A., .....8th & Spring Garden,....Philadelphia.  
 Sharp, Edward W., .....2542 Richmond, .....Philadelphia.  
 Sharp, John R., .....225 Broad, .....Johnstown.  
 Sharp, John W., .....2542 Richmond, .....Philadelphia.  
 Sharp, Otis S., .....Dayton, .....Armstrong county.  
 Sharp, Warren R., .....Coatesville, .....Chester county.  
 Sharpless, Ambrose H.,...Catawissa, .....Columbia county.  
 Shaw, Henry B., .....Narberth, .....  
 Shaw, John F., .....Girardville, .....Schuylkill county.  
 Shaw, John Thos., .....1616 Howarth, .....Frankford.  
 Sheaffer, E. Parke, .....34th & Spruce, .....Philadelphia.  
 Shearer, Edgar Y., .....149 E. 71st, .....New York.  
 Sheehan, Thos. A., .....1736 S. 18th, .....Philadelphia.

Sheehan, Wm. H., .....1937 S. 2d, .....Philadelphia.  
 Sheely, Edward V., .....19th & Chestnut, .....Philadelphia.  
 Sheets, Geo. F., .....Monongahela, .....Washington county.  
 Sheetz, Henry W., .....So. Bethlehem, .....Northampton county.  
 Sheitz, Lloyd A., .....1041 S. 3d, .....Philadelphia.  
 Shelar, J. W., .....Mt. Pleasant, .....Westmoreland county.  
 Shellar, Edgar C., .....Munhall, .....Allegheny county.  
 Shelley, Jacob A., .....Mechanicsburg, .....Cumberland county.  
 Shelley, Jay L., .....5500 Vine, .....Philadelphia.  
 Shemp, Russel N., .....1336 Green, .....Philadelphia.  
 Shenk, John B., .....2336 Coral, .....Philadelphia.  
 Shenkel, M. R., .....Phoenixville, .....Chester county.  
 Sheppard, John W., .....203 Walnut Place, .....Philadelphia.  
 Shepley, Howard R., .....Blairsville, .....Indiana county.  
 Sherger, John A., .....267 Herr street, .....Harrisburg.  
 Sheridan, James H., .....So. Bethlehem, .....Northampton county.  
 Shimer, Arthur B., .....Martins Creek, .....Northampton county.  
 Shimer, Miles H., .....1618 Page, .....Philadelphia.  
 Shindel, John G., .....Middleburg, .....Snyder county.  
 Shingle, Geo. W., .....600 N. 11th, .....Philadelphia.  
 Shingle, S. H., .....1444 N. 19th, .....Philadelphia.  
 Shinn, Howard G., .....1339 N. 15th, .....Philadelphia.  
 Shipley, Ewing H., .....6831 McPherron, .....Pittsburgh.  
 Shirey, Orville L., .....4034 Germantown ave., ..Philadelphia.  
 Shissler, A. G., .....Shamokin, .....Northumberland county.  
 Shissler, Henry J., .....Shamokin, .....Northumberland county.  
 Shiveley, Fredk. B., ....Fayetteville, .....Franklin county.  
 Shoemaker, Chas. W., ....211 Hamilton, .....Allentown.  
 Shoemaker, Clinton L., ..29th & Thompson, .....Philadelphia.  
 Shoemaker, Geo. W., ....Allentown, .....Lehigh county.  
 Shomberg, Alber F., .....12th ave. & 12th street, ..Altoona.  
 Shookers, Tobias S., .....Mountville, .....Lancaster county.  
 Shope, Jacob, .....Hummelstown, .....Dauphin county.  
 Shore, Thos. W., .....2300 N. 21st, .....Philadelphia.  
 Showalter, Wm. A., .....Latrobe, .....Westmoreland county.  
 Shreve, Alex., .....Moore, .....Delaware county.  
 Shryer, Clarence R., .....401 N. Main ave., .....Scranton.  
 Shryock, Allen, .....1129 Mt. Vernon, .....Philadelphia.  
 Shugar, Wm. G., .....635 Cumberland, .....Lebanon.  
 Shuler, Howard A. S., ..Liverpool, .....Perry county.  
 Shuler, Samuel M., .....Liverpool, .....Perry county.  
 Shull, Carl W., .....326 E. Girard ave., .....Philadelphia.  
 Shull, David F., .....3928 Market, .....Philadelphia.  
 Shumaker, Edgar K., ....New Bethlehem, .....Clarion county.  
 Shumaker, Jesse B., ....Beaver, .....Beaver county.  
 Shumaker, Phillip W., ...New Bethlehem, .....Clarion county.  
 Sibbald, John, .....Fox Chase, .....Philadelphia.  
 Sible, Lewis A., .....225 Broad street, .....Johnstown.  
 Sickler, Fredk. V., .....Mill City, .....Wyoming county.  
 Sickler, Harvey, 2d, .....Tunkhannock, .....Wyoming county.  
 Sickler, Samuel H., .....Scranton, .....Lackawanna county.  
 Siddall, Wm. F., .....1301 Race, .....Philadelphia.  
 Sides, Howard B., .....Downingtown, .....Chester county.

Sieber, Isaac G., .....9 N. 3d, .....Camden, N. J.  
 Sieger, Clinton W., .....Siegfried Bridge, .....Northampton county.  
 Siegfried, Henry J., .....Highland & Centre aves., Pittsburgh.  
 Siegfried, Howard J., ....4676 Frankford ave., ....Philadelphia.  
 Siegfried, John M., .....Warren, .....Warren county.  
 Siegle, Herman C., .....1514 S. 10th, .....Philadelphia.  
 Sieling, James, .....Wylie & Kirkpatrick avs., Pittsburgh.  
 Sierer, John, .....3925 Germantown ave., ..Philadelphia.  
 Simes, Samuel, .....3 S. 22d, .....Philadelphia.  
 Simes, W. L., .....13 S. 13th, .....Philadelphia.  
 Simmonds, Annie, .....Shamokin, .....Northumberland county.  
 Simmonds, Thos. F., .....Shamokin, .....Northumberland county.  
 Simmons, Chas. B., .....Oil City, .....Venango county.  
 Simmons, Martin S., .....Oil City, .....Venango county.  
 Simonis, Otto, Jr., .....818 New Market street, ..Philadelphia.  
 Simons, Harry F., .....6th & Diamond, .....Philadelphia.  
 Simons, James D., .....Braddock, .....Allegheny county.  
 Simons, Robert, .....4908 Saybrook ave., .....Philadelphia.  
 Simpler, W. E., .....1043 Market, .....Philadelphia.  
 Simpson, Robert, .....1729 Vine, .....Philadelphia.  
 Simpson, Robert A., .....N. Clarendon, .....Warren county.  
 Singer, J. Anson, .....Forty Fort, .....Luzerne county.  
 Singer, Robert L., .....Pennsburg, .....  
 Sipe, Geo. W., .....Carlisle, .....Cumberland county.  
 Sipe, John E., .....Carlisle, .....Cumberland county.  
 Sipes, Clarence L., .....1261 N. 15th, .....Philadelphia.  
 Sitgreaves, W. C., .....Cumberland & Cedar, ....Philadelphia.  
 Sitler, Alpheus, .....Harmony, .....Butler county.  
 Skelton, Will. O., .....Sheffield, .....Warren county.  
 Skillman, Lionel G., .....17th & Bainbridge, .....Philadelphia.  
 Skinner, Harry W., .....1410 Chestnut, .....Philadelphia.  
 Slater, James B., .....Johnstown, .....Cambria county.  
 Slaughter, John V., .....5400 Germantown ave., ..Philadelphia.  
 Slemmer, Edward, .....1803 Girard ave., .....Philadelphia.  
 Slick, Ross M., .....65th & Haverford ave., ..Philadelphia.  
 Sloan, E. M., .....226 Allegheny ave., .....Allegheny.  
 Slobodkin, Rose, .....515 Pine, .....Philadelphia.  
 Slough, Agnes M., .....845 Hamilton street, .....Allentown.  
 Slough, Frank J., .....845 Hamilton street, .....Allentown.  
 Slough, Minnie H. A., ...845 Hamilton street, .....Allentown.  
 Small, John H., Jr., ....133 E. Market, .....York.  
 Smart, Clarence W., .....126 Anderson, .....Philadelphia.  
 Smart, Thos. H., .....1200 Callowhill, .....Philadelphia.  
 Smedley, Bennett L., .....2050 Vine, .....Philadelphia.  
 Smiley, Edwin R., .....5500 Vine, .....Philadelphia.  
 Smiley, Laura M., .....5500 Vine, .....Philadelphia.  
 Smink, Robert W., .....405 W. Pine, .....Shamokin.  
 Smink, Wm. H. R., .....33 Market street, .....Shamokin.  
 Smith, Albert H., .....3128 Frankford ave., .....Philadelphia.  
 Smith, Arthur N., .....4099 Lancaster ave., .....Philadelphia.  
 Smith, Beaton, .....7th & Pine, .....Wilmington, Del.  
 Smith, Benj. F., .....1851 Franklin Place, .....Harrisburg.  
 Smith, Benj. J., .....2643 N. 27th, .....Philadelphia.

Smith, Byron A., .....Erie, .....Erie county.  
 Smith, Chas. Adam, .....Boyertown, .....  
 Smith, Chas. E. R., .....3306 Hamilton, .....Philadelphia.  
 Smith, Chas. H., .....Uniontown, .....Fayette county.  
 Smith, Christopher C., ...Frankford, .....Philadelphia.  
 Smith, Clarence C., .....Camptown, .....Bradford county.  
 Smith, Clarence T., .....117 E. Cumberland, .....Philadelphia.  
 Smith, Daniel W., .....West Moshannon, .....Clearfield county.  
 Smith, Dennis C., .....Guys Mills, .....Crawford county.  
 Smith, Edward W., .....764 W. 4th, .....Williamsport.  
 Smith, Eugene F., .....1631 Wyoming ave., .....Scranton.  
 Smith, Frank, .....Millerton, .....Tioga county.  
 Smith, Frank W., .....Spring Creek, .....Warren county.  
 Smith, Fred. A., .....Spring Creek, .....Warren county.  
 Smith, Fred. W., .....Erie, .....Erie county.  
 Smith, Fred. W., .....603 Grays Ferry Road, ..Philadelphia.  
 Smith, G. A., .....Liberty, .....Tioga county.  
 Smith, Geo. A., .....3875 Aspen, .....Philadelphia.  
 Smith, Geo. L., .....5538 Wayne ave., .....Germantown.  
 Smith, Harry A., .....2d & Tioga, .....Philadelphia.  
 Smith, Harry E., .....Parkesburg, .....Chester county.  
 Smith, Harry L., .....Hazleton, .....Luzerne county.  
 Smith, Hays, .....801 Lincoln ave., .....Pittsburgh.  
 Smith, Herbert J., .....1725 Cherry, .....Philadelphia.  
 Smith, Horace, .....3 E. Market, .....York.  
 Smith, Horace L., .....Jeannette, .....Westmoreland county.  
 Smith, Howard M., .....2445 Ridge ave., .....Philadelphia.  
 Smith, Jacob W., .....Mauch Chunk, .....Carbon county.  
 Smith, James H., .....Conneautville, .....Crawford county.  
 Smith, James T., .....Sunbury, .....Northumberland county.  
 Smith, James R., .....1221 5th ave., .....Pittsburgh.  
 Smith, J. C., .....McKeesport, .....Allegheny county.  
 Smith, J. M., .....Mansfield, .....Tioga county.  
 Smith, John C., .....7103 Penn ave., .....Pittsburgh.  
 Smith, Joseph V., Jr., ....390 Arch, .....Philadelphia.  
 Smith, Judson S., .....Tyrone, .....Blair county.  
 Smith, Lawrence B., .....New Brighton, .....Beaver county.  
 Smith, Paul, .....New Berlin, .....  
 Smith, Prescott A., .....Camptown, .....Bradford county.  
 Smith, Reuben, .....Kittanning, .....Armstrong county.  
 Smith, Robert V., .....1301 Columbia ave., .....Philadelphia.  
 Smith, Rodney, .....Saegertown, .....  
 Smith, Samuel M., .....Waynesburg, .....Greene county.  
 Smith, Samuel S., .....Huntingdon, .....Huntingdon county.  
 Smith, S. F., .....236 W. 4th, .....Williamsport.  
 Smith, Sherman F., .....236 W. 4th, .....Williamsport.  
 Smith, Sylvester S., .....Emporium, .....Cameron county.  
 Smith, Thos. B., .....13th & Race, .....Philadelphia.  
 Smith, Walter L., .....1701 Penn ave., .....Pittsburgh.  
 Smoker, Howard G., .....146 S. 6th, .....Columbia.  
 Smyser, Eugene M., .....Wissinoming, .....Philadelphia.  
 Smyser, John R., .....York Springs, .....Adams county.  
 Smyser, Willis L., .....235 W. York ave., .....York.

Smythe, John Reid, .....13th & Ritner, .....Philadelphia.  
 Snavely, Clarence O., ....Lebanon, .....Lebanon county.  
 Snavely, Harry B., .....60 N. Prince, .....Lancaster.  
 Snavely, H. H., .....Mechanicsburg, .....Cumberland county.  
 Snodgrass, David G., ....Conneaut Lake, .....Crawford county.  
 Snodgrass, Frank, .....Washington, .....Washington county.  
 Snyder, Bertram, .....5523 Pulaski ave., .....Germantown.  
 Snyder, Frank H., .....Mahanoy City, .....Schuylkill county.  
 Snyder, Herman H., .....16th & Vine, .....Philadelphia.  
 Snyder, Henry M., .....146 N. Queen, .....Lancaster.  
 Snyder, Howard G., ....219 6th street, .....Pittsburgh.  
 Snyder, John N., .....Somerset, .....Somerset county.  
 Snyder, Myron F., .....Hawley, .....Wayne county.  
 Snyder, Plymouth W., ....Hollidaysburg, .....Blair county.  
 Snyder, R. R., .....Shippensburg, .....Clarion county.  
 Sonntag, Maximilian, ...3358 Germantown ave., ..Philadelphia.  
 Sorber, Louis S., .....19th & Fitzwater, .....Philadelphia.  
 Sorg, Albert M., .....5652 Rural ave., .....Pittsburgh.  
 Southwick, Eugene P., ..Bradford, .....McKean county.  
 Sowash, Geo., .....Irwin, .....Westmoreland county.  
 Sowash, Samuel J., .....Slippery Rock, .....Butler county.  
 Spaeth, Julius, .....Carbondale, .....Lackawanna county.  
 Spalding, Geo. M., .....Wellsboro, .....Tioga county.  
 Spalding, Morell G., ....Bradford, .....McKean county.  
 Spang, Chas. A., .....275 Ridge ave., .....Allegheny.  
 Spangler, G. E., .....602 Arch, .....Philadelphia.  
 Spangler, T. G., .....602 Arch, .....Philadelphia.  
 Sparkes, S. J., .....Montrose, .....Susquehanna county.  
 Sparks, Edgar R., .....2327 Brown, .....Philadelphia.  
 Sparling, Wyndham, ....Monaca, .....Beaver county.  
 Spath, Geo. B., .....7206 Woodland ave., ....Philadelphia.  
 Spayd, Chas. W., M. D., ..39 E. Market, .....Wilkes-Barre.  
 Speakman, Wm. E., .....528 Arch, .....Philadelphia.  
 Spear, Wm. L., .....1001 S. 7th, .....Philadelphia.  
 Spears, Edward G., .....701 Cambria, .....Philadelphia.  
 Speck, Herbert A., .....145 N. 10th, .....Philadelphia.  
 Speer, Edgar L., .....Chambersburg, .....Franklin county.  
 Speer, James F., .....Germantown, .....Philadelphia.  
 Speer, John D. P., .....1801 Webster ave., .....Pittsburgh.  
 Speicher, Asa F., .....Elk Lick, .....Somerset county.  
 Spenceley, C. E., .....609 W. Norris, .....Philadelphia.  
 Spencer, Edward T., ....15th & Arch, .....Philadelphia.  
 Spencer, Edwin F., .....Ebensburg, .....Cambria county.  
 Spencer, Fredk. M., .....Honesdale, .....Wayne county.  
 Spengler, Aaron, .....S. Easton, .....Northampton county.  
 Spickler, Walter S., .....249 N. Queen, .....Lancaster.  
 Spilker, Henry A., .....5205 Butler, .....Pittsburgh.  
 Spohn, Jacob, .....39 Shiloh, .....Pittsburgh.  
 Spotts, Albert O., .....52d & Master, .....Philadelphia.  
 Spragle, Elmer, .....Bartonsville, .....  
 Sprecher, Henry F., ....603 Montgomery ave., ....Philadelphia.  
 Sprenger, Wm. A., .....2d & Green, .....Philadelphia.  
 Springer, Everett F., ...Belle Vernon, .....Westmoreland county.



Springer, R. Ethan, .....Unlontown, .....Fayette county.  
 Sprissler, Clara, .....9th & South, .....Philadelphia.  
 Sprissler, Oscar, .....1600 N. 8th, .....Philadelphia.  
 Sprissler, Theo., .....9th & South, .....Philadelphia.  
 Stackhouse, Joseph A., ..Bristol, .....Bucks county.  
 Stafford, Peter P., .....1624 Peach, .....Erie.  
 Stahel, Albert Wm., .....2843 Diamond, .....Philadelphia.  
 Stahle, Robert U., .....11 S. 16th, .....Philadelphia.  
 Stahler, Eugene A., .....Bridgeport, .....Montgomery county.  
 Stahler, Harry L., .....Norristown, .....Montgomery county.  
 Stallman, Harry R., .....Norristown, .....Montgomery county.  
 Stanford, Ralph O., .....North Clarendon, .....Warren county.  
 Stang, Peter, .....4203 Aspen, .....Philadelphia.  
 Stanley, Alfred G., .....Lykens, .....Dauphin county.  
 Stansburg, Wilson V., ....3144 Frankford ave., .....Philadelphia.  
 Stanton, John E., .....26th & Lehigh ave., .....Philadelphia.  
 Stanton, Thos. J., .....1900 Green, .....Philadelphia.  
 Staples, Byron E., .....Jersey Shore, .....Lycoming county.  
 Starck, A. A. G., .....160 Girard ave., .....Philadelphia.  
 Stark, Wm. G., .....Secane, .....Delaware county.  
 Starr, John W., .....Millersburg, .....Dauphin county.  
 Statham, Beach J., .....18th & Master, .....Philadelphia.  
 Statler, Chas. H., .....406 Main, .....Johnstown.  
 Stauffer, Wm. M., .....New Holland, .....  
 Steadman, M. L., .....Mifflinburg, .....Union county.  
 Steans, John C., .....Mifflinburg, .....Union county.  
 Stearns, Isaac, .....428 S. 5th, .....Philadelphia.  
 Stearns, Moses, .....428 S. 5th, .....Philadelphia.  
 Steck, Chas. T., .....Berwick, .....Chester county.  
 Steckman, Chas. A., .....444 W. Orange, .....Lancaster.  
 Stedem, F. W. E., .....Broad & Fairmount ave., Philadelphia.  
 Stedem, L. S. A., .....1351 N. 11th, .....Philadelphia.  
 Steel, Chalmen A., .....Huntingdon, .....Huntingdon county.  
 Steel, Harry E., .....Huntingdon, .....Huntingdon county.  
 Steel, Wm. H., .....2033 N. 19th, .....Philadelphia.  
 Steele, Hurbert A., .....McDonald, .....Allegheny.  
 Steele, Wm. A., .....308 Federal, .....  
 Steelman, Peter, .....5533 Woodland ave., .....Philadelphia.  
 Steen, James H., .....Conshohocken, .....Montgomery county.  
 Steever, Aaron M., .....6th & Boas, .....Harrisburg.  
 Steever, Chas. C., .....Millersburg, .....Dauphin county.  
 Steever, E. W., .....Millersburg, .....Dauphin county.  
 Stem, Preston E., .....So. Bethlehem, .....Northampton county.  
 Stem, W. Nelson, .....2000 Callowhill, .....Philadelphia.  
 Stein, Matthew R., .....Mahanoy City, .....Schuylkill county.  
 Steinmetz, Wm. B., .....9th & Vine, .....Philadelphia.  
 Steinmetz, Wm. F., .....2838 Girard ave., .....Philadelphia.  
 Steltz, Louis, .....157 Penn ave., .....Allegheny.  
 Steltz, Harry S., .....2235 Columbla ave., .....Philadelphia.  
 Steltzer, Lewis J., .....2450 N. 6th, .....Philadelphia.  
 Steltzer, Nathan S., .....701 Cambria, .....Philadelphia.  
 Stenger, Bernard J., .....Sheffield, .....Warren county.  
 Stenger, Jos. W., .....Mt. Oliver, .....Allegheny county.

Stephen, Mrs. Annie R.,...Sheridan, .....Lebanon county.  
 Stephen, Walker L., .....525 Elm, .....Reading.  
 Stephen, Willie L., .....947 Penn street, .....Reading.  
 Stephens, Edward F., ....McKeesport, .....Allegheny county.  
 Stephens, H. D. F., .....302 Mickle street, .....Camden, N. J.  
 Sterner, Oliver H., .....Frankford, .....Philadelphia.  
 Sterrett, Robert M., .....6130 Penn ave., .....Pittsburgh.  
 Stevens, Atherton B., ....S. Canaan, .....Wayne county.  
 Stevens, Edward H., .....Laceyville, .....Wyoming county.  
 Stevens, John C., .....230 S. 13th, .....Harrisburg.  
 Stevens, S. S., .....724 Penn street, .....Reading.  
 Stevens, Wm. A., .....Hamilton, .....Wayne county.  
 Stevenson, Fred. L., .....37th & Spring Garden, ...Philadelphia.  
 Stevenson, Geo. F., .....43d & Lancaster ave., ...Philadelphia.  
 Stevenson, John V., .....Greensburg, .....Westmoreland county.  
 Stevenson, Silas, .....Ellwood City, .....Lawrence county.  
 Stewart, Albert H., .....Sharon, .....Mercer county.  
 Stewart, Andrew J., .....33 Carey ave., .....Wilkes-Barre.  
 Stewart, Chas. J., .....1312 Lincoln ave., .....Pittsburgh.  
 Stewart, Henry C., .....4434 Lancaster ave., .....Philadelphia.  
 Stewart, John H., .....Williamsport, .....Lycoming county.  
 Stewart, Samuel, .....122 E. Ohio street, .....Allegheny.  
 Stewart, Thos. D., .....Delta, .....York county.  
 Stewart, Wm. L., .....Wilmerding, .....  
 Stichter, Henry D., .....3014 Germantown ave., ..Philadelphia.  
 Stiefel, Ernest C., .....59 Fulton, .....Pittsburgh.  
 Stiles, Henry A., .....Ulster, .....Bradford county.  
 Stiles, Henry L., .....601 N. 33d, .....Philadelphia.  
 Stiles, Thos. J., .....Berwick, .....Columbia county.  
 Stimus, Howard G., .....Moorestown, .....New Jersey.  
 Stine, Howard F., .....Birdsboro, .....Berks county.  
 Stineman, Jacob J., .....Duquesne, .....Allegheny county.  
 Stoever, J. M., .....Broad St. Sta. Pharmacy, Philadelphia.  
 Stoffregen, Louis F., .....Pottsville, .....Schuylkill county.  
 Stoke, H. Alex., .....Reynoldsville, .....Jefferson county.  
 Stoler, David M., .....Saxton, .....Bedford county.  
 Stommel, Henry A., .....5214 Kershau ave., .....Philadelphia.  
 Stone, Nathaniel, .....Corry, .....Erie county.  
 Stoner, Wm. J., .....219 6th street, .....Pittsburgh.  
 Storey, Alex. W., .....North Clarendon, .....Warren county.  
 Stout, Edward C., .....4628 Woodland ave., .....Philadelphia.  
 Stout, John H., .....Milton, .....Northumberland county.  
 Stout, Lemuel, .....112 Market, .....Philadelphia.  
 Stout, P. Samuel, .....4628 Woodland ave., .....Philadelphia.  
 Stout, Wm. S., .....Pittsburgh, .....Allegheny county.  
 Stoy, Gus A. B., .....Waynesburg, .....Greene county.  
 Strasser, Thos. A., .....931 Penn, .....Reading.  
 Stratton, Albert G., .....1001 S. 8th, .....Philadelphia.  
 Stratton, Geo., .....Linesville, .....Crawford county.  
 Straub, Frank, .....Danville, .....Montour county.  
 Strawinski, I. F., .....York, .....York county.  
 Streeper, Austin J., .....311 Haws ave., .....Norristown.  
 Streeper, Frank P., .....Chestnut Hill, .....Philadelphia.

Streeter, N. Dunham, ....2600 N. 12th, .....Philadelphia.  
 Stretch, John Jr., .....1401 Federal, .....Allegheny.  
 Streuber, Harry J., .....119 W. 18th, .....Erie.  
 Stricker, Julius, .....Portage, .....Cambria county.  
 Stright, Aleck P., .....1408 5th ave., .....McKeesport.  
 Stright, Stephen A., .....Braddock, .....Allegheny county.  
 Strode, R. Clark, .....44th & Lancaster ave., ..Philadelphia.  
 Strohecker, James F., ....Beavertown, .....Snyder county.  
 Strohm, Theo. B., .....Mt. Holly Springs, .....Cumberland county.  
 Strott, Geo. G., .....821 Penn ave., .....Pittsburgh.  
 Strott, John, .....1251 Penn ave., .....Pittsburgh.  
 Stroud, John Geary, .....West Chester, .....Chester county.  
 Stroup, Freeman P., .....12th & Vine, .....Philadelphia.  
 Stroup, John C., .....Berrysburg, .....  
 Stroup, Joseph H., .....1231 N. 12th, .....Philadelphia.  
 Strouse, Theo. H., .....3126 Columbia ave., .....Philadelphia.  
 Strunk, Lewis C., .....139 Brown, .....Philadelphia.  
 Strunk, Sam. W., .....1800 N. 15th, .....Philadelphia.  
 Strunz, Christ. E., .....Shiloh & Sycamore, .....Pittsburgh.  
 Stryker, Leslie R., .....Corydon, .....Warren county.  
 Stuart, Jesse E., .....102 Northampton, .....Wilkes-Barre.  
 Stuckert, Herman H., ....639 Hamilton, .....Allentown.  
 Stuckey, Emil G., .....New Brighton, .....Beaver county.  
 Stuebner, Albert J., .....66 Carroll street, .....Allegheny.  
 Stump, Adam F. M., .....Womelsdorf, .....Berks county.  
 Sturdevant, Dennis W., ..Laceyville, .....Wyoming county.  
 Sturgeon, W. J., .....Kittanning, .....Armstrong county.  
 Stybr, Emil J., .....25 Chestnut, .....Allegheny.  
 Suess, John P., .....31 W. 4th, .....Williamsport.  
 Sullivan, James F., .....4th & Wolf, .....Philadelphia.  
 Sulouff, Samuel H., .....1237 S. Broad, .....Philadelphia.  
 Sultzbach, Harry M., .....203 E. King, .....Lancaster.  
 Sunday, C. P., .....1820 Columbia ave., .....Philadelphia.  
 Sunderland, Henry, .....1252 S. 13th, .....Philadelphia.  
 Supplee, Isaac M., .....20th & Berks, .....Philadelphia.  
 Supplee, Jesse L., .....13th & Green, .....Philadelphia.  
 Supplee, Wm. E., .....665 N. 8th, .....Philadelphia.  
 Sutter, W. L., .....606 7th ave., .....Beaver Falls.  
 Sutliff, Sidney W., .....Nanticoke, .....Luzerne county.  
 Sutton, Geo. S., .....Jeannette, .....Westmoreland county.  
 Sutton, Samuel, .....1201 Christian, .....Philadelphia.  
 Sutton, W. H., .....5th & Susquehanna ave.,..Philadelphia.  
 Swain, Edward T., .....Renovo, .....Clinton county.  
 Swain, Harry, .....2047 S. 3d, .....Philadelphia.  
 Swainbank, Chas. M., ....72 S. Main, .....Wilkes-Barre.  
 Swainbank, Harry H., ...72 S. Main, .....Wilkes-Barre.  
 Swarger, E. F. D., .....306 Broad, .....Harrisburg.  
 Swartley, Harry C., .....1410 Chestnut, .....Philadelphia.  
 Swartley, Harry M., .....44 N. 36th, .....Philadelphia.  
 Swarts, Wm. J., .....North East, .....Erie county.  
 Swartz, Calvin J., .....Washington, .....Washington county.  
 Swartz, Chas. M., .....Hughesville, .....Lycoming county.  
 Swartz, Edward F., .....62 N. Washington, .....Wilkes-Barre.

Swartz, John R., .....Hughesville, .....Lycoming county.  
Swearer, John L., .....Allegheny, .....Allegheny county.  
Swearinger, Wm. H., .....5147 Penn ave., .....Pittsburgh.  
Sweeley, Wm., .....So. Williamsport, .....Lycoming county.  
Sweeney, Chas. W., .....4400 Germantown ave., ..Philadelphia.  
Sweeney, Thos. J., .....1952 Wayne Terrace, .....Philadelphia.  
Szarzynski, Stanley ,.....805 Carson, .....Pittsburgh.  
Szlupus, John, .....421 Penn ave., .....Scranton.  
Tafel, Adolph L., .....1011 Arch, .....Philadelphia.  
Tafel, Edward F., .....114 Ohio, .....Allegheny.  
Taggart, David, .....Frackville, .....Schuylkill county.  
Taggart, Geo. C., .....9th & Race, .....Philadelphia.  
Taggart, Leonard, .....Emporium, .....Cameron county.  
Tall, Thos. A., Jr., .....Chestnut Hill, .....Philadelphia.  
Taney, John M., .....Johnstown, .....Cambria county.  
Tannehill, Manoah, .....Confluence, .....Somerset county.  
Tassell, Mary E., .....Gettysburg, .....Adams county.  
Tassell, W. H., .....Shingle House, .....Potter county.  
Taylor, Claude E., .....Forest City, .....Susquehanna county.  
Taylor, Coe S., .....Altoona, .....Blair county.  
Taylor, Elbridge G., ....Meadville, .....Crawford county.  
Taylor, Elijah L., .....2014 Broad, .....Altoona.  
Taylor, Geo. H., .....1827 Ginnodo street, .....Philadelphia.  
Taylor, Howard D., .....Camden, .....New Jersey.  
Taylor, John D., .....22d & Morris, .....Philadelphia.  
Taylor, Joseph Y., .....2338 N. 6th, .....Philadelphia.  
Taylor, Lynwood S., .....Spring City, .....Chester county.  
Taylor, Merle H., .....Wylie ave. & Chatham st., Pittsburgh.  
Taylor, Millard F., .....Leechburg, .....Armstrong county.  
Taylor, Robert W., .....Mahanoy City, .....Schuylkill county.  
Taylor, W. Carroll, .....Spring City, .....Chester county.  
Taylor, W. Clark, .....Vineland, .....New Jersey.  
Tea, Geo. W., .....3400 Penn ave., .....Pittsburgh.  
Templeton, Samuel Y., ..Danville, .....Montour county.  
Terne, Henry B., .....5101 Market, .....Philadelphia.  
Terppe, Fredk. L., .....Scranton, .....Lackawanna county.  
Terry, John H., .....24th & Thompson, .....Philadelphia.  
Test, Ellwood, .....1401 N. 7th, .....Philadelphia.  
Thatcher, J. P., .....West Chester, .....Chester county.  
Thayer, Edward M., .....1829 Mervine, .....Philadelphia.  
Thomas, Albert D., .....Forty Fort, .....Luzerne county.  
Thomas, Daniel J., .....Scranton, .....Lackawanna county.  
Thomas, Frank B., .....Myersdale, .....Somerset county.  
Thomas, Geo. M., .....Derry Station, .....Westmoreland county.  
Thomas, Harry F., .....Greensburg, .....Westmoreland county.  
Thomas, Howard E., .....2128 Warnock, .....Philadelphia.  
Thomas, James D., .....Evans City, .....Butler county.  
Thomas, John L., .....5th & Walnut, .....McKeesport.  
Thomas, Thomas D., .....Lehighon, .....Carbon county.  
Thomas, V. F., .....Baldwin, .....Butler county.  
Thompson, Benj. S., .....West Chester, .....Chester county.  
Thompson, Charles, .....643 E. Market, .....Scranton.  
Thompson, Chas. A., ....Irwin, .....Westmoreland county.

Thompson, E. F., ..... Titusville, ..... Crawford county.  
 Thompson, E. J., ..... Erie, ..... Erie county.  
 Thompson, Geo. N., ..... 942 N. 19th, ..... Philadelphia.  
 Thompson, Harry H., .... Munson Station, ..... Clearfield county.  
 Thompson, Harry M., ... 2254 2d ave., ..... Pittsburgh.  
 Thompson, Henry M., ... Carnegie, ..... Allegheny county.  
 Thompson, Henry M., .... 1300 S. 5th, ..... Philadelphia.  
 Thompson, Isaac N., .... North Hope, .....  
 Thompson, James S., .... Union City, ..... Fayette county.  
 Thompson, John R., .... Hookstown, ..... Beaver county.  
 Thompson, John R., .... 2272 2d ave., ..... Pittsburgh.  
 Thompson, Joseph B., ... Gap, ..... Lancaster county.  
 Thompson, Lester A., .... Mahaffey, .....  
 Thompson, Melville S., .. Coudersport, ..... Potter county.  
 Thompson, Robert D., ... Freedom, ..... Beaver county.  
 Thompson, Samuel H., ... 4th & Race, ..... Philadelphia.  
 Thompson, Samuel Y., ... Danville, ..... Montour county.  
 Thompson, Wm. C., .... Coatesville, ..... Chester county.  
 Thompson, Wm. F., .... 1304 Derry street, ..... Harrisburg.  
 Thorley, J. D., ..... Ridge ave., ..... Harrisburg.  
 Thorley, Thos. A., ..... 449 State, ..... Harrisburg.  
 Thornton, Thos. R., .... 720 S. 8th, ..... Philadelphia.  
 Thornley, F. C., ..... 1638 Franklin, ..... Philadelphia.  
 Thrush, Morris C., ..... 3224 Mt. Vernon, ..... Philadelphia.  
 Thum, John K., ..... 641 Jackson, ..... Philadelphia.  
 Tibbins, Geo. H., ..... Noxan, ..... Wyoming county.  
 Tice, Wm. B., ..... 105 Clinton street, ..... Johnstown.  
 Tidball, Frank B., ..... 24 Washington ave., ..... Pittsburgh.  
 Tiefenbach, Jacob F., .... Jenkintown, .....  
 Tiffany, L. Elbert, ..... Hallstead, ..... Susquehanna county.  
 Tiffany, Judson E., ..... Pleasant Mount, ..... Wayne county.  
 Timmins, C. E., ..... Gettysburg, ..... Adams county.  
 Tinsley, Grant S., ..... Wrightsville, ..... York county.  
 Tobias, J. Herbert, ..... 1900 N. 22d, ..... Philadelphia.  
 Toboldt, L. E. F., ..... 1201 Columbia ave., ..... Philadelphia.  
 Tod, Alva F., ..... 5th & Diamond, ..... Philadelphia.  
 Todd, Bela B., ..... Beaver Falls, ..... Beaver county.  
 Todd, Harry B., ..... 140 Tioga ave., ..... Pittsburgh.  
 Todd, J. C., ..... Manayunk, ..... Philadelphia.  
 Toelke, Chas., ..... 1629 Walnut, ..... Philadelphia.  
 Tomkinson, H. L., ..... Ardmore, ..... Montgomery county.  
 Tomlinson, Geo. W., .... Torresdale, ..... Philadelphia.  
 Tomlinson, John, ..... 4800 Westminster ave., .. Philadelphia.  
 Tomlinson, Wells, ..... 2122 N. 11th, ..... Philadelphia.  
 Tonson, Alfred E., ..... 824 State, ..... Erie.  
 Toon, J. Louis, ..... 46th & Lancaster ave., .. Philadelphia.  
 Topliss, Wm. G., ..... 4939 Germantown ave., .. Germantown.  
 Torrence, Albert, ..... 218 Market, ..... Pittsburgh.  
 Torrence, James, ..... 218 Market, ..... Pittsburgh.  
 Totten, R. M., ..... 43d & Butler, ..... Pittsburgh.  
 Toubill, James P., ..... 15 N. Main, ..... Pittston.  
 Towler, Samuel S., ..... Marienville, ..... Forest county.  
 Townsend, Addie R., .... Frankford, ..... Philadelphia.

Townsend, Edward S., ..1001 S. 11th, .....Philadelphia.  
 Trauck, Chas. C., .....Langhorne, .....Bucks county.  
 Traut, Henry C., .....Girard, .....Erie county.  
 Treichler, C. G., .....Honey Brook, .....Chester county.  
 Treichler, Louis A., .....Main & Penn, .....Germantown.  
 Trenchard, John F., .....2502 Richmond, .....Philadelphia.  
 Tribby, Elmer E., .....5213 5th ave., .....Pittsburgh.  
 Trist, Edwin A., .....928 S. 9th, .....Philadelphia.  
 Troop, Wm. W., .....320 N. 9th, .....Reading.  
 Troth, Ernest A., .....17th & Bainbridge, .....Philadelphia.  
 Troth, Frank D., .....Knoxville, .....Allegheny county.  
 Trout, Chas. C., .....Girardville, .....Schuylkill county.  
 Trout, Nicholas C., .....Fairfield, .....Adams county.  
 Trout, W. S., .....4060 Haverford street, ...Philadelphia.  
 Trout, Zachary T., .....Girardville, .....Schuylkill county.  
 Troutman, Geo. F., .....Centralia, .....Columbia county.  
 Truckenmiller, Frank E., Watontown, .....Northumberland county.  
 Trumbauer, Henry T., ..Coopersburg, .....Lehigh county.  
 Trupp, Louis, .....900 N. 8th, .....Philadelphia.  
 Tuck, Henry C., .....7 S. Main, .....Wilkes-Barre.  
 Tuck, Thos. L., .....Oil City, .....Venango county.  
 Tuck, Wm. H., .....178 Hazle ave., .....Wilkes-Barre.  
 Tucker, Robert W., .....16th & Race., .....Philadelphia.  
 Tuller, Philo, .....Tioga, .....Tioga county.  
 Turner, Alexander, .....11th & Oxford, .....Philadelphia.  
 Turner, Curtis W., .....441 Green, .....Philadelphia.  
 Turner, Dudley H., .....Towanda, .....Bradford county.  
 Turner, Herbert W., .....1308 11th ave., .....Altoona.  
 Turner, Joseph C., .....2000 S. 12th, .....Philadelphia.  
 Turner, Philip P., .....5th & Jackson, .....Philadelphia.  
 Turner, Wm. J., .....Sewickley, .....Allegheny county.  
 Turtle, Alfred, .....Crafton, .....Allegheny county.  
 Tustin, Joseph C., .....Bustleton, .....Philadelphia.  
 Tye, Frank J., .....1200 Poplar, .....Philadelphia.  
 Tyler, Geo. C., .....823 N. Broad, .....Philadelphia.  
 Tyler, Watson, .....40 S. Market, .....Shamokin.  
 Tyler, Wm. C., .....Rouseville, .....Venango county.  
 Ueberroth, H. M., .....Bethlehem, .....Northampton county.  
 Uhler, S. P., .....133 Cattell street, .....Easton.  
 Ulmer, Stephen E., .....409 S. 8th, .....Philadelphia.  
 Ulsh, J. Howard, .....Selins Grove, .....Snyder county.  
 Umstead, Walter H., .....20th & Christian, .....Philadelphia.  
 Unangst, Eugene P., .....Bethlehem, .....Northampton county.  
 Underwood, James H., ...Woodbury, .....New Jersey.  
 Urben, Chas. L., .....Fulton & Locust, .....Allegheny.  
 Urben, Fred. L., .....2131 Carson, .....Pittsburgh.  
 Urben, Henry A., .....2131 Carson, .....Pittsburgh.  
 Urben, Joseph P., .....Fulton & Locust, .....Allegheny.  
 Urey, Frank F., .....Sandy Lake, .....Mercer county.  
 Urquhart, Geo. W., .....3646 N. Broad, .....Philadelphia.  
 Utech, Philip H., .....Meadville, .....Crawford county.  
 Vanarsdale, David A., ...81 Taggart street, .....Allegheny.  
 Van Buskirk, S. L., .....822 W. Lehigh ave., .....Philadelphia.

|                         |       |                         |       |                        |
|-------------------------|-------|-------------------------|-------|------------------------|
| Vance, Wm. S.,          | ..... | Washington,             | ..... | Washington county.     |
| Vanderbeck, J. A.,      | ..... | 602 S. 2d,              | ..... | Philadelphia.          |
| Vandergrift, Wm. H. F., | ..... | Bridesburg,             | ..... | Philadelphia.          |
| Van Dyke, James,        | ..... | Sunbury,                | ..... | Northumberland county. |
| Van Dyke, James W.,     | ....  | Highstown,              | ..... | New Jersey.            |
| Van Dyke, Wm. C.,       | ..... | 1518 Tioga,             | ..... | Philadelphia.          |
| Van Kork, Wm.,          | ..... | 17th & Summer,          | ..... | Philadelphia.          |
| Van Loon, James,        | ..... | 217 E. Market,          | ..... | Wilkes-Barre.          |
| Van Nort, Wm. A.,       | ..... | 1513 N. 29th,           | ..... | Philadelphia.          |
| Van Noten, Robert E.,   | ...   | Cooperstown,            | ..... | Venango county.        |
| Van Valzah, John A.,    | ....  | 1715 S. 12th,           | ..... | Philadelphia.          |
| Vermilya, Sherman S.,   | ...   | Grover,                 | ..... | Bradford county.       |
| Vernon, Mary G.,        | ..... | Clifton Heights,        | ..... | Delaware county.       |
| Vetter, Mary E.,        | ..... | 415 Penn ave.,          | ..... | Scranton.              |
| Vetter, Philip J.,      | ..... | 415 Penn ave.,          | ..... | Scranton.              |
| Vischer, S. A. O.,      | ..... | 1216 Girard ave.,       | ..... | Philadelphia.          |
| Vockrodt, G. A.,        | ..... | 1719 5th ave.,          | ..... | Pittsburgh.            |
| Vogel, Louis H.,        | ..... | 4067 Penn ave.,         | ..... | Pittsburgh.            |
| Vogelbach, Edmund C.,   | ..    | 2332 Frankford ave.,    | ....  | Philadelphia.          |
| Vogelbach, Jacob H.,    | ....  | 2457 N. 5th,            | ..... | Philadelphia.          |
| Voorbees, Chas. D.,     | ..... | Instanter,              | ..... |                        |
| Vosburg, E. Fred.,      | ..... | Du Bois,                | ..... | Clearfield county.     |
| Vosburg, Herman F.,     | ....  | 3201 Columbia ave.,     | ..... | Philadelphia.          |
| Vosburg, Louis C.,      | ..... | Ashland,                | ..... | Schuylkill county.     |
| Vosburg, T. B.,         | ..... | Skidders Eddy,          | ..... | Wyoming county.        |
| Voss, F. J. G.,         | ..... | 2536 E. Allegheny ave., | ..    | Philadelphia.          |
| Vowell, Louis S.,       | ..... | Washington,             | ..... | Washington county.     |
| Wagenseller, Geo. C.,   | ....  | Selins Grove,           | ..... | Snyder county.         |
| Wagner, Geo. L.,        | ..... | 2114 Master,            | ..... | Philadelphia.          |
| Wagner, John O.,        | ..... | Beaver Springs,         | ..... | Snyder county.         |
| Walte, Thos. C.,        | ..... | City Hall,              | ..... | Allegheny.             |
| Walte, Wm. A.,          | ..... | Sugar Notch,            | ..... | Luzerne county.        |
| Waltz, Frank,           | ..... | Flemington,             | ..... | Clinton county.        |
| Wakefield, J. C.,       | ..... | Vinco,                  | ..... | Cambria county.        |
| Waldenberger, Louis,    | ....  | Manayunk,               | ..... | Philadelphia.          |
| Waldner, Herman T.,     | ....  | Ashland,                | ..... | Schuylkill county.     |
| Walk, Elwood P.,        | ..... | Hazleton,               | ..... | Luzerne county.        |
| Walker, Alfred C.,      | ..... | Sewickley,              | ..... | Allegheny county.      |
| Walker, Francis W.,     | ..... | New Brighton,           | ..... | Beaver county.         |
| Walker, Frank F.,       | ..... | Sharpsburg,             | ..... | Allegheny county.      |
| Walker, John J.,        | ..... | Braddock,               | ..... | Allegheny county.      |
| Walker, Robert A.,      | ..... | West Monterey,          | ..... | Clarion county.        |
| Walker, Wm. B.,         | ..... | Clarksburg,             | ..... | Indiana county.        |
| Wallace, John C.,       | ..... | New Castle,             | ..... | Lawrence county.       |
| Wallace, Robert S.,     | ..... | East Brady,             | ..... | Clarion county.        |
| Wallington, Edward M.,  | ..... | London Grove,           | ..... | Chester county.        |
| Wallis, Alfred W.,      | ..... | 1374 2d ave.,           | ..... | Pittsburgh.            |
| Wallis, James M.,       | ..... | 2630 E. Lehigh ave.,    | ....  | Philadelphia.          |
| Walter, Albert B.,      | ..... | Wilkes-Barre,           | ..... | Luzerne county.        |
| Walter, Eyer,           | ..... | Shippensburg,           | ..... | Cumberland county.     |
| Walter, Fredk. L.,      | ..... | 2d & Green,             | ..... | Philadelphia.          |
| Walter, Wm. Bell,       | ..... | 800 Walnut,             | ..... | Philadelphia.          |
| Walter, Wm. C.,         | ..... | 684 N. 13th,            | ..... | Philadelphia.          |



Walter, Wm. H., .....1700 N. 2d, .....Philadelphia.  
 Waterman, Benj. C., .....3875 Aspen, .....Philadelphia.  
 Walther, Chas. L., .....64 Chestnut, .....Philadelphia.  
 Walther, Ernest T., .....1501 Buena Vista, .....Allegheny.  
 Walthour, S. L., .....Greensburg, .....  
 Walton, David R., .....London Grove, .....Chester county.  
 Walton, Geo. R., .....Malvern, .....Chester county.  
 Walton, Harry H., .....823 N. Broad, .....Philadelphia.  
 Walton, L. L., .....4th & Pine, .....Williamsport.  
 Walz, Frank J., .....1223 N. 6th, .....Harrisburg.  
 Wamsley, James A., .....1838 Diamond, .....Philadelphia.  
 Ward, Eliab T., .....843 S. 3d, .....Philadelphia.  
 Ward, J. M. B., .....Chester, .....Delaware county.  
 Ward, Merton B., .....3811 Hamilton, .....Philadelphia.  
 Warfel, Wm. S., .....King & Pine, .....Lancaster.  
 Warg, Edwin C., .....1101 Arch, .....Philadelphia.  
 Warner, Edward E., .....914 S. 7th, .....Philadelphia.  
 Warner, Wm. R., .....1228 Market, .....Philadelphia.  
 Warner, Wm. R., Jr., ....1228 Market, .....Philadelphia.  
 Warnock, Frank M., .....213 Sinclair, .....McKeesport.  
 Warren, Thos. R., .....Elkland, .....Tioga county.  
 Warrington, Chas. W., ..1700 Mt. Vernon, .....Philadelphia.  
 Wasley, Annis, .....Shenandoah, .....Schuylkill county.  
 Wasley, F. S., .....Shenandoah, .....Schuylkill county.  
 Wasley, Harry M., .....Shenandoah, .....Schuylkill county.  
 Waters, Chas., .....449 N. Main, .....Pittston.  
 Waters, John B., .....Catawissa, .....Lancaster county.  
 Waters, Thos. C., .....Kingston, .....Luzerne county.  
 Watkins, Chas. J., .....Olyphant, .....Lackawanna county.  
 Watkins, Edmund H., ....Kane, .....McKean county.  
 Watkins, Theo. F., .....5825 Germantown ave., ..Philadelphia.  
 Watkins, Thos. W., .....Olyphant, .....Lackawanna county.  
 Watkins, Wm. W., .....Peckville, .....Lackawanna county.  
 Watson, David B., .....20 Chestnut, .....Allegheny.  
 Watson, James K., .....McEwensville, .....Northumberland county.  
 Watson, James N., .....120 S. 13th, .....Philadelphia.  
 Watson, J. I., .....1106 Chestnut, .....Philadelphia.  
 Watson, Maurice, .....Bristol, .....Bucks county.  
 Watson, Walter W., .....331 S. Broad, .....Philadelphia.  
 Watson, Wm. C., .....5651 Market, .....Philadelphia.  
 Watson, Wm. P., .....Clearfield, .....Clearfield county.  
 Weakley, John J., .....105 N. George, .....York.  
 Weatherley, T. O., .....Eastern Penitentiary, ...Philadelphia.  
 Weaver, Geo. P., .....5533 Woodland ave., ....Philadelphia.  
 Weaver, James B., .....729 Filbert, .....Philadelphia.  
 Weaver, Jacob G., .....Strasburg, .....Lancaster county.  
 Weaver, Uriah M., .....412 4th street, .....Altoona.  
 Weaver, Wm. J., .....Strasburg, .....Lancaster county.  
 Weaver, Wm. W., .....63d & Woodland ave., ....Philadelphia.  
 Webb, Horace G., .....Coral & York, .....Philadelphia.  
 Webbert, Harry S., .....Mechanicsburg, .....Cumberland county.  
 Weber, Alex. A., .....2812 Oxford, .....Philadelphia.  
 Weber, Antonie W., .....6219 Penn ave., .....Pittsburgh.

Weber, Augustus, .....6th & Washington, .....Philadelphia.  
Weber, Frank C., .....Ambler, .....Montgomery county.  
Weber, Jacob, .....10th & Cumberland, .....Philadelphia.  
Weber, Jeremiah, .....2954 Richmond, .....Philadelphia.  
Weber, Peter, .....5600 Penn ave., .....Pittsburgh.  
Weber, Reinhard J., .....43d & Fairmount ave., ..Philadelphia.  
Weber, Wm., .....108 S. Main, .....Pittston.  
Wedemeyer F. G., .....6th & Snyder ave., .....Philadelphia.  
Wegener, August G., .....1439 S. 6th, .....Philadelphia.  
Wehler, Randolph, .....New Oxford, .....Adams county.  
Weida, Chas., .....Braddock, .....Allegheny county.  
Welda, Chas. A., .....917 Penn street, .....Reading.  
Weidemann, C. A., .....22d & Green, ..... Philadelphia.  
Weidner, David J., .....1501 N. 12th, .....Philadelphia.  
Weigle, Gilbert H., .....1704 N. 3d, .....Harrisburg.  
Weills, Chas. R., .....1802 N. 4th, .....Harrisburg.  
Weills, Isaac M., .....Washington, .....Washington county.  
Weills, Wm., M. D., .....1802 N. 4th, .....Harrisburg.  
Weis, Wm., .....921 Washington, .....Reading.  
Weiser, Henry K., .....1034 E. Columbia ave., ..Philadelphia.  
Weiser, S. B., .....Millersburg, .....Dauphin county.  
Weishaar, H. P., .....206 Main, .....Pittsburgh.  
Weisner, N. F., .....2349 Germantown ave., ..Philadelphia.  
Weiss, Chas. J., .....2128 5th ave., .....Pittsburgh.  
Weiss, Christian, .....600 W. Girard ave., .....Philadelphia.  
Weiss, Hervey B., .....1936 Howard, .....Philadelphia.  
Weiss, W. M., .....Penn ave. & 6th, .....Pittsburgh.  
Weltzel, Sue C., .....Greensburg, .....Westmoreland county.  
Welch, John C., .....Eldred, .....McKean county.  
Weller, E. V., .....2 Filmore street, .....Allegheny.  
Weller, Harry C., .....740 W. 4th, .....Williamsport.  
Wellman, Herbert J., ....Cambridge Springs, .....Crawford county.  
Wells, Elmore H., .....Meshoppen, .....Wyoming county.  
Welsch, Benj. P., .....McEwensville, .....Northumberland county.  
Welshous, Wm. P., .....Butler, .....Butler county.  
Wenck, Mary McCay, ....228 Chestnut, .....Sunbury.  
Wenck, S. M. G., .....Northumberland, .....Northumberland county.  
Wenck, Wm. G., .....Northumberland, .....Northumberland county.  
Wendel, H. Edward, .....3d & George, .....Philadelphia.  
Wendel, Wm., .....1926 Fountaine, .....Philadelphia.  
Wenger, J. Lincoln, .....9 E. King, .....Lancaster.  
Wenner, Alfred J., .....88. S. Washington street, Wilkes-Barre.  
Wenner, Harvey E., .....1246 Poplar, .....Philadelphia.  
Wenrick, Alfred B., .....1210 Cherry, .....Philadelphia.  
Wentzler, H. G., .....1115 Mt. Vernon, .....Philadelphia.  
Werckshagen, C. A., .....5th & Jefferson, .....Philadelphia.  
Werle, Fredk. H., .....76 East street, .....Allegheny.  
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 Cline, Wm. E., .....2147 S. 15th, .....Philadelphia.  
 Colbert, Walter E., .....Oil City, .....Venango county.  
 Coldsmith, Chas. F., .....Mt. Pleasant, .....Westmoreland county.  
 Cole, Percy L., .....Honesdale, .....Wayne county.  
 Coleman, Chas. M., .....Forbes & Dithridge, .....Pittsburgh.  
 Coleman, Edward W., ...Canonsburg, .....Washington county.  
 Collins, Harry R., .....632 N. 18th, .....Philadelphia.  
 Collins, Lane V., .....16th & Tasker, .....Philadelphia.  
 Comfort, C. C., .....2800 Federal, .....Philadelphia.  
 Cone, Earl H., .....1908 Arch, .....Philadelphia.  
 Conklin, Claude E., .....603 Grays Ferry Road, ..Philadelphia.  
 Connelly, John J., .....1901 S. 18th, .....Philadelphia.  
 Conner, Joseph M., .....Carbondale, .....Lackawanna county.  
 Cook, F. X., .....Gettysburg, .....Adams county.  
 Cooper, Clyde H., .....333 S. Prince, .....Lancaster.

|                        |                       |                      |
|------------------------|-----------------------|----------------------|
| Copeland, Harry T.,    | Greensburg,           | Westmoreland county. |
| Copland, Maud P.,      | Philadelphia,         | Philadelphia.        |
| Corbett, J. P.,        | New Bethlehem,        | Clarion county.      |
| Corbett, N. A.,        | 125 N. 16th,          | Philadelphia.        |
| Cormeny, Frank H.,     | 532 S. Queen,         | Lancaster.           |
| Corson, Harry L.,      | Jersey Shore,         | Lycoming county.     |
| Cox, Harriet F.,       | 4234 Germantown ave., | Philadelphia.        |
| Craig, B. J.,          | 1216 Chestnut,        | Philadelphia.        |
| Craig, Harry F.,       | St. Petersburg,       | Clarion county.      |
| Craig, Ralph B.,       | 1124 N. 39th,         | Philadelphia.        |
| Craig, Wm. F.,         | 4301 Butler,          | Pittsburgh.          |
| Crane, Wm. H.,         | 914 Snyder ave.,      | Philadelphia.        |
| Crawford, Walter B.,   | 1014 Cherry,          | Philadelphia.        |
| Creighton, Wm. S.,     | 71st & Woodland ave., | Philadelphia.        |
| Criswell, Edward O.,   | 3401 Wharton,         | Philadelphia.        |
| Crittenden, Samuel W., | Oswago,               | Potter county.       |
| Croushore, H. G.,      | Grapeville,           | Westmoreland county. |
| Crubbison, Wm. A.,     | New Castle,           | Lawrence county.     |
| Currin, P. C.,         | 1220 W. 4th,          | Williamsport.        |
| Cyphers, Frank R.,     | East Pittsburgh,      | Allegheny county.    |
| Dague, H. L.,          | Charleroi,            | Washington county.   |
| Davey, Wm. F.,         | Dushore,              | Sullivan county.     |
| Davies, H. P., Jr.,    | 713 S. Main ave.,     | Scranton.            |
| Davies, W. P.,         | 2501 N. Broad,        | Philadelphia.        |
| Davis, Jacob B.,       | York,                 | York county.         |
| Davis, Lewis E.,       | Main & Callowhill,    | Philadelphia.        |
| Davis, L. F.,          | Mt. Union,            | Huntingdon county.   |
| Davis, Royal S.,       | 219 S. 10th,          | Philadelphia.        |
| Davis, Thos. F.,       | 337 E. Market,        | Wilkes-Barre.        |
| Davis, Wm. B.,         | 1738 French,          | Philadelphia.        |
| Davis, Wm. D.,         | Mahanoy City,         | Schuylkill county.   |
| Davis, Wm. N.,         | Summit Hill,          | Carbon county.       |
| De Beust, Wm. H.,      | 1801 South,           | Philadelphia.        |
| Dennes, Elmer S.,      | 146 N. Queen,         | Lancaster.           |
| De Normandie, F. R.,   | 166 S. Main,          | Washington.          |
| Denther, Roy W.,       | 153 N. 10th,          | Philadelphia.        |
| Derr, Wm. G.,          | New Castle,           | Lawrence county.     |
| Dershimer, Harry S.,   | Kittanning,           | Armstrong county.    |
| Desch, E. A.,          | 3348 Market,          | Philadelphia.        |
| Devine, O. C.,         | 1316 S. 18th,         | Philadelphia.        |
| Dewey, A. L.,          | Eldred,               | McKean county.       |
| DeWitt, Frank A.,      | 76 East,              | Allegheny.           |
| Diehl, Andrew T.,      | 15th & Market,        | Philadelphia.        |
| Dillon, Thos. H., Jr., | 1319 Arch,            | Philadelphia.        |
| Dillon, Robert,        | Coraopolis,           | Allegheny county.    |
| Dimon, Chas. A.,       | 1020 Walnut,          | Philadelphia.        |
| Dirmitt, Jennie,       | 1201 S. 19th,         | Philadelphia.        |
| Doan, Chester C.,      | 1240 N. 29th,         | Philadelphia.        |
| Dobson, L. S.,         | 2224 N. 30th,         | Philadelphia.        |
| Doersam, Philip J.,    | Scranton,             | Lackawanna county.   |
| Donaldson, F. P.,      | Canonsburg,           | Washington county.   |
| Donnelly, P. V.,       | Archbald,             | Lackawanna county.   |
| Donovan, John B.,      | Laceyville,           | Lycoming county.     |

Dooley, John J., .....1247 Snyder ave., .....Philadelphia.  
 Dorman, Wm. A., .....Phoenixville, .....Chester county.  
 Dorsey, Clarence M., ....Hamlet & Ophelia, .....Pittsburgh.  
 Dorwart, Wm. E., .....3932 Frankford ave., .....Philadelphia.  
 Dougherty, John T., .....1226 S. 27th, .....Philadelphia.  
 Dougherty, Wm. P., .....Wrightsville, .....York county.  
 Doyle, J. Jesse, .....Surgeons Hall, .....Allegheny county.  
 Duer, Milton A., .....Pitcairn, .....  
 Duffy, Thos., .....1523 N. American, .....Philadelphia.  
 Duncan, Fredk., .....916 5th ave., .....Pittsburgh.  
 Dunlap, Wm. J., .....Fayette City, .....Fayette county.  
 Dunn, Edwin A., .....Braddock, .....Allegheny county.  
 Dunn, Milton, .....Rouseville, .....Venango county.  
 Dunning, Geo. A., .....East Stroudsburg, .....Monroe county.  
 Eby, Benj. S., .....Newport, .....Perry county.  
 Eby, Mrs. Kate R., .....Newport, .....Perry county.  
 Eckels Frank H., .....15th & Ritner, .....Philadelphia.  
 Eckels, Paul, .....600 S. Broad, .....Philadelphia.  
 Eddy, Eugene H., .....711 N. 6th, .....Philadelphia.  
 Eddy, Roswell M., .....423 S. 18th, .....Philadelphia.  
 Edwards, M. B., .....38th & Lancaster ave., ...Philadelphia.  
 Eggers, Howard C., .....172 Ohio, .....Allegheny.  
 Eggert, Wm. F., .....1315 W. Wishart, .....Philadelphia.  
 Eldridge, Wm. A., .....1252 S. 13th, .....Philadelphia.  
 Elfreth, G. A., .....400 Queen, .....Philadelphia.  
 Elwell, R. F., .....642 Diamond, .....Philadelphia.  
 Ely, Wm. C., .....Ridge & Girard ave., .....Philadelphia.  
 Emery, David H., .....Corry, .....Erie county.  
 Ensign, Edward O., .....Waymare, .....Wayne county.  
 Ensminger, S. C. D., .....Manheim, .....Lancaster county.  
 Entwistle, Albert H., .....Frankford, .....Philadelphia.  
 Eppler, Geo. T., .....1500 N. 19th, .....Philadelphia.  
 Eshelman, E. G., .....1828 Mt. Vernon, .....Philadelphia.  
 Espenschade, R. C., .....Mifflintown, .....Juniata county.  
 Essick, Clara B., .....Picture Rocks, .....Lycoming county.  
 Estlack, Walter F., .....1233 S. 17th, .....Philadelphia.  
 Evans, Thos. J., .....Plymouth, .....Luzerne county.  
 Fabian, Asa., .....500 W. Lehigh ave., .....Philadelphia.  
 Fagnan, Geo. C., .....Bradford, .....McKean county.  
 Falkenhainer, Chas., .....1202 Green, .....Philadelphia.  
 Fargo, C. T., .....Erie, .....Erie county.  
 Farles, John J., .....Pottsville, .....Schuylkill county.  
 Farles, Joseph B., .....3807 Hamilton, .....Philadelphia.  
 Farr, A. B., .....3600 Richmond, .....Philadelphia.  
 Farrell, Martin E., .....601 W. Marshall, .....Norristown.  
 Fawcett, Albert E., .....2448 5th ave., .....Pittsburgh.  
 Fay, Howard C., .....1120 11th ave., .....Altoona.  
 Feather, M. S., .....Schuylkill Haven, .....Schuylkill county.  
 Fegely, Geo. C., .....532 S. 18th, .....Philadelphia.  
 Fegley, John S., .....544 Front, .....Allentown.  
 Feidler, Forrest F., .....Erie, .....Erie county.  
 Fetter, Thos. S., .....Shippensburg, .....Cumberland county.  
 Filer, B. B., .....913 S. 13th, .....Philadelphia.

Filman, Walter T., .....3421 Spring Garden, .....Philadelphia.  
 Finger, Philip C., .....551 W. Vine, .....Lancaster.  
 Fisher, Chas. A., .....843 N. 8th, .....Philadelphia.  
 Fisher, Geo. C., .....526 E. Indiana ave., .....Philadelphia.  
 Fisher, John A., .....59th & Haverford ave., ..Philadelphia.  
 Flster, Chas. W., .....4900 Woodland ave., ....Philadelphia.  
 Fithian, Margaret J., .....Grove City, .....Mercer county.  
 Felcher, Geo., .....Fryburg, .....Clarion county.  
 Fleming, James R., .....Forest City, .....Susquehanna county.  
 Fleming, John H., .....Media, .....Delaware county.  
 Fleming, Samuel C., .....4900 Arch, .....Philadelphia.  
 Fletcher, Geo. M., .....9th & State, .....Erie.  
 Fluss, Julius, .....301 S. 2d, .....Harrisburg.  
 Flynn, John F., .....7th & Parrish, .....Erie.  
 Foehl, E. J., .....Paradise, .....Lancaster county.  
 Foltz, Edgar D. G., .....1802 Columbia ave., .....Philadelphia.  
 Foote, Richard F., .....Archbald, .....Lackawanna county.  
 Foote, Sara J., .....Canonsburg, .....Washington county.  
 Ford, Michael, .....144 S. Main, .....Pittston.  
 Foster, Joseph S., .....Petrolia, .....Butler county.  
 Foster, Wm. N., .....2652 Ann, .....Philadelphia.  
 Foucar, Chas. R., .....Oil City, .....Venango county.  
 Fox, David S., .....Everson, .....Fayette county.  
 Fox, Irvin B., .....1120 Cumberland, .....Lebanon.  
 Frank, H. E., .....621 Race, .....Harrisburg.  
 Frantz, Adam G., .....800 McKean, .....Philadelphia.  
 Frantz, Wm. H., .....Homestead, .....Allegheny county.  
 Freck, Harry C., Jr., ....Williamsport, .....Lycoming county.  
 Frederici, John K., .....1505 Race, .....Philadelphia.  
 French, Rolland H., .....1908 Arch, .....Philadelphia.  
 Fretz, Wm. Reed, .....1901 Arch, .....Philadelphia.  
 Froelich, W. S., .....Germantown, .....Philadelphia.  
 Fulton, C. C., .....5023 Woodland, .....Philadelphia.  
 Furman, Edward F., .....Shenandoah, .....Schuylkill county.  
 Gaertner, Darwin R., ....767 S. 9th, .....Philadelphia.  
 Galer, Frank A., .....239 S. 15th, .....Philadelphia.  
 Gallaher, Wm. W., .....6th & Vine, .....Philadelphia.  
 Garber, Frank, .....Greenville, .....Mercer county.  
 Gass, Frank W., .....178 McClure ave., .....Allegheny.  
 Gayetty, Edward E., ....Oil City, .....Venango county.  
 Gearhart, M. J. ,.....Reading, .....Berks county.  
 Gehringer, E. F., .....2800 Germantown ave., ..Philadelphia.  
 George, J. B. R., .....2801 Penn ave., .....Pittsburgh.  
 German, Elias, .....Slatington, .....Lehigh county.  
 Gessford, Otice E., .....920 N. 41st, .....Philadelphia.  
 Getel, J. Ralph E., .....1133 S. Broad, .....Philadelphia.  
 Gilbert, Harry, .....Everson, .....Fayette county.  
 Gillan, Chas., M. D., .....3327 N. 21st, .....Frankford.  
 Gillespie, Chas. D., .....426 Diamond, .....Pittsburgh.  
 Gillespie, Frank, .....Freeport, .....Armstrong county.  
 Gillespie, M. S., .....Edinboro, .....Erie county.  
 Gills, Claude B., .....Kane, .....McKean county.  
 Glover, Oliver W. H., ....Laurelton, .....Union county.

Goldhaber, Jacob, .....531 Mountain, .....Philadelphia.  
 Goldsmith, James M., ....Tarentum, .....Allegheny county  
 Good, James R., .....Mercer, .....Mercer county.  
 Gooder, Albert, .....Brookville, .....Jefferson county.  
 Goring, M. E., .....1329 Castle ave., .....Philadelphia.  
 Grakelow, Ralph, .....2343 Sydneham, .....Philadelphia.  
 Green, Frank E., .....1701 South, .....Philadelphia.  
 Greenblatt, Max, .....331 Kemball, .....Philadelphia.  
 Greenfield, Lewis T., .....518 Smithfield, .....Pittsburgh.  
 Greenstein, Emanuel, ....644 Pine, .....Philadelphia.  
 Greenstein, Morris, .....217 Lincoln, .....Wilkes-Barre.  
 Greer, Mary C., .....3319 N. Broad, .....Philadelphia.  
 Greisamer, H. F., .....601 N. 6th, .....Philadelphia.  
 Griffin, John L., .....Greenville, .....Mercer county.  
 Griffith, Oliver B., .....Front & Lehigh ave., ....Philadelphia.  
 Grimes, P. E., .....Plymouth, .....Luzerne county.  
 Groblewski, A. G., .....Plymouth, .....Luzerne county.  
 Grubb, Geo. H., .....2620 Colorado, .....Philadelphia.  
 Grumer, Robert, .....Easton, .....Northampton county.  
 Gunn, John A., .....Hastings, .....Cambria county.  
 Hackenberger, Ira N., ...Bainbridge, .....Lancaster county.  
 Hackenberger, John L., ..29th & Diamond, .....Philadelphia.  
 Hacker, Geo. W., .....200 Mayflower, .....Pittsburgh.  
 Haeberle, Louis P., .....2605 Styles, .....Philadelphia.  
 Hagy, Wm. H. R., .....3601 Lancaster ave., ....Philadelphia.  
 Hahn, Chas., .....2301 Christian, .....Philadelphia.  
 Hall, Annie M., .....Avenue, .....Allegheny county.  
 Hall, Chas. B., .....Erie, .....Erie county.  
 Hall, Guy P., .....New Kensington, .....Westmoreland county  
 Hamilton, Esther C., ....Wilmerding, .....Allegheny county.  
 Hamilton, Mary E., ....Coraopolis, .....Allegheny county.  
 Hamilton, Wm. H., .....Shippensburg, .....Cumberland county.  
 Hammel, Henry, .....33 Cedar, .....Reading.  
 Hampson, Wm. H., .....1759 N. 3d, .....Philadelphia.  
 Hannington, B. J., .....600 N. 11th, .....Philadelphia.  
 Hannon, Frank A., .....New Castle, .....Lawrence county.  
 Harback, E. J., .....344 N. 6th, .....Reading.  
 Harmony, E. F., .....27 S. 16th, .....Philadelphia.  
 Harner, Russell S., .....Ogontz, .....  
 Harper, A. R. H., .....64 Wabash, .....Pittsburgh.  
 Harrell, Herbert D., .....17th & Montgomery ave., Philadelphia.  
 Harris, Ira C., .....Braddock, .....Allegheny county.  
 Harris, Wm. K. G., .....13th & Cambria, .....Philadelphia.  
 Harrold, Wm. H., .....8th & Cumberland, .....Philadelphia.  
 Harter, Chas. W., .....Muncy, .....  
 Hartleb, Fritz, .....1374 2d ave., .....Pittsburgh.  
 Hartman, Frank G., .....136 N. Duke, .....Lancaster.  
 Hartung, E. W., .....1302 Dover, .....Philadelphia.  
 Hartung, Fred. A., .....Harmony, .....Butler county.  
 Hartwell, Samuel, .....Coudersport, .....Potter county.  
 Hassinger, S. R., .....2239 W. Fairmount ave.,..Philadelphia.  
 Hauber, C. H., .....119 Poplar, .....Philadelphia.  
 Haydock, Mabelle, .....2147 Locust, .....Philadelphia.

Hayman, Walter, .....229 S. 10th, .....Philadelphia.  
 Hecker, Virginia, .....Willow Grove, .....Montgomery county.  
 Heckman, H. V., .....Kremis, .....  
 Heerlein, R. M., .....New Castle, .....Lawrence county.  
 Heffelfinger, Wm. E., ....200 S. 4th, .....Reading.  
 Hefferman, J. A., .....101 N. Main ave., .....Scranton.  
 Hellman, R. A., .....118 Warren, .....Allegheny.  
 Helm, Robert, .....1614 N. 2d, .....Philadelphia.  
 Hendrickson, Raymond, ..17th & Columbia ave., ..Philadelphia.  
 Hendrickson, Wm. R., ...1801 N. 8th, .....Philadelphia.  
 Herold, Geo. W., .....McKeesport, .....Allegheny county.  
 Herr, Harry M., .....334 E. King, .....Lancaster.  
 Herrmann, Wm., .....Pottsville, .....Schuylkill county.  
 Hershey, E. L., .....Columbia, .....Lancaster county.  
 Hertzler, John C., .....146 N. Queen, .....Lancaster.  
 Hertzler, O. H., .....16 E. King, .....Lancaster.  
 Hess, Clarke F., .....2201 Hunting Park ave.,..Philadelphia.  
 Hess, Fredk. Wm., .....4433 Woodland ave., ....Philadelphia.  
 Hess, Paul H. B., .....2176 Wylie ave., .....Pittsburgh.  
 Hetrick, H. L., .....1201 Pine, .....Philadelphia.  
 Heverly, James F., .....Howard, .....Centre county.  
 Hewitt, Morris E., .....Mill Village, .....Erie county.  
 Heyser, J. E., .....1336 S. 46th, .....Philadelphia.  
 Hickman, H. G., .....334 E. King, .....Lancaster.  
 Hickock, Geo. R., .....Troy, .....Bradford county.  
 Highfield, H. M., .....808 N. 17th, .....Philadelphia.  
 Hibbish, John H., .....1501 Locust, .....Philadelphia.  
 Hildebrand, H. O., .....Camden, .....New Jersey.  
 Hildebrand, W. M., .....Marion, .....Indiana county.  
 Hildebrand, Wm. G., .....1439 S. 15th, .....Philadelphia.  
 Hilliard, Bayard, .....328 N. 54th, .....Philadelphia.  
 Hinckel, G. E., .....2137 N. 18th, .....Philadelphia.  
 Hinski, Oscar N., .....2738 E. Allegheny ave., ..Philadelphia.  
 Hinterleiter, P. L., .....121 Ohio, .....Allegheny.  
 Hires, Lewis M., .....Bridgeton, .....New Jersey.  
 Hite, Joseph R., .....65 Rebecca, .....Allegheny.  
 Hodgson, Arthur R., ....Rochester, .....Beaver county.  
 Hoegel, Frank C., .....106 Fountain, .....Allegheny.  
 Hoelzle, Wm., .....37 Alma, .....Allegheny.  
 Hoffman, John C., .....203 Chatham, .....Williamsport.  
 Hoffman, Oscar P., .....437 Hamilton, .....Easton.  
 Hoffman, Wm. S., .....5100 Main, .....Germantown.  
 Hoge, Winfred, .....1436 5th ave., .....Pittsburgh.  
 Holbert, Robert S., .....819 Penn ave., .....Pittsburgh.  
 Hollopeter, Martha E., ..Shickshinny, .....Luzerne county.  
 Holmes, Wm. D., .....Waterford, .....Erie county.  
 Holstein, Geo. L., .....Lebanon, .....Lebanon county.  
 Horner, Charlotte H., ....608 S. 42d, .....Philadelphia.  
 Horner, Chas. M., .....608 S. 42d, .....Philadelphia.  
 Horst, Harry L., .....527 Main, .....Johnstown.  
 Hostetter, Harry J., .....1131 Franklin, .....Reading.  
 Hottenstein, P. D., .....10th & York, .....Philadelphia.  
 Householder, Chas. E., ...250 Broad, .....Harrisburg.



Hubler, Guy G., .....504 N. 6th, .....Philadelphia.  
 Hubley, Anna M., .....134 N. Lime, .....Lancaster.  
 Hudson, Harry, Jr., .....2000 N. 22d, .....Philadelphia.  
 Huffer, W. C., .....1701 South, .....Philadelphia.  
 Huffman, J. F., .....Etna, .....Allegheny county.  
 Hughes, H. K., .....5100 Penn ave., .....Pittsburgh.  
 Hughes, Wm. D., .....419 Deckers Court, .....Scranton.  
 Humpton, A. N., .....614 N. 33d, .....Philadelphia.  
 Hunsberger, A. S., .....621 Parrish, .....Philadelphia.  
 Hunter, David C., .....412 Market, .....Pittsburgh.  
 Immel, R. D., .....Auburn, .....Schuylkill county.  
 Infield, James C., .....20 Windsor, .....Allegheny.  
 Irvine, John, Jr., .....518 Smithfield, .....Pittsburgh.  
 Irwin, Geo. R., .....Clearfield, .....Clearfield county.  
 Jacoby, Thos. D., .....1800 N. 11th, .....Philadelphia.  
 Jacoby, Wm. L., .....1600 Pine, .....Philadelphia.  
 Jelliff, G. E., .....2636 E. Clearfield, .....Philadelphia.  
 Jenckes, Sidney J., .....Montrose, .....Susquehanna county.  
 Jenkins, David J., .....1528 Jackson, .....Scranton.  
 Jennings, Juliet M., .....Sewickley, .....Allegheny county.  
 Jennings, Wm. F., .....Morton, .....Delaware county.  
 Jester, Thos. E., .....West Elizabeth, .....Allegheny county.  
 Johnson, C. N., .....Uniontown, .....Fayette county.  
 Johnson, Chas. H., .....Scranton, .....Lackawanna county.  
 Johnson, D. Lester, .....New Brighton, .....Beaver county.  
 Johnson, Edward T., .....6381 Germantown ave., ..Philadelphia.  
 Johnson, Frank R., .....1300 W. 3d, .....Chester.  
 Johnson, Ralph H., .....Wilkinsburg, .....Allegheny county.  
 Jones, Comer C., .....Miners Mills, .....Luzerne county.  
 Jones, Edward E., .....Harford, .....Susquehanna county.  
 Jones, Geo. S., .....Scranton, .....Lackawanna county.  
 Jones, Robert P., .....Belle Vernon, .....Fayette county.  
 Jordy, Louis, .....103 E. Princess, .....York.  
 Kalkman, H. A., .....1039 N. 3rd, .....Philadelphia.  
 Kaufman, Samuel, .....5th & Lombard, .....Philadelphia.  
 Kazunas, L. M., .....Shenandoah, .....Schuylkill county.  
 Keagy, Edwin J., .....205 Main, .....Pittsburgh.  
 Kearns, Wm., .....2611 E. Lehigh ave., ....Philadelphia.  
 Keen, Claude, .....947 Penn, .....Reading.  
 Keiser, Edwin L., .....West Milton, .....Union county.  
 Keller, Robert J., .....2607 Germantown ave., ..Philadelphia.  
 Kelly, Clara E., .....Pleasant Unity, .....Westmoreland county.  
 Kelly, Edward J., .....11th & Master, .....Philadelphia.  
 Kelly, Edward J., .....409 4th, .....Scranton.  
 Kelly, Harry M., .....Beaver Falls, .....Beaver county.  
 Kelly, James L., .....1902 W. 3d, .....So. Chester.  
 Kendall, Benj. F., .....Marionville, .....Forest county.  
 Kendig, Harvey E., .....2001 Cherry, .....Philadelphia.  
 Kennedy, Wm. M., .....2401 E. Huntingdon, ....Philadelphia.  
 Kennihan, John W., .....Sharpsburg, .....Allegheny county.  
 Keogh, Walter E., .....37 W. Vine, .....Lancaster.  
 Keylor, Josiah B., .....Cochranville, .....Chester county.  
 King, Chas. T., .....1946 Diamond, .....Philadelphia.

Kleim, Harry C., ..... Bloomsburg, ..... Columbia county.  
 Kleinle, Geo., ..... Easton, ..... Northampton county.  
 Klenk, Horace D., ..... Centralia, ..... Columbia county.  
 Klingler, Peter, ..... Kratzerville, ..... Snyder county.  
 Klopp, Edward J., ..... 526 Penn, ..... Reading.  
 Knabb, Milton H., ..... 1350 Cotton, ..... Reading.  
 Knauss, Wm. M., ..... 714 Hamilton, ..... Allentown.  
 Knerr, Chas. G., ..... 722 Hamilton, ..... Allentown.  
 Koehler, Geo., ..... 1800 S. 6th, ..... Philadelphia.  
 Kramer, Geo. H., ..... 2232 Howard, ..... Philadelphia.  
 Kraus, Wm. F. C., ..... 2801 Poplar, ..... Philadelphia.  
 Krauser, James S., ..... Milton, ..... Northumberland county.  
 Krewson, C. M., ..... 4401 Frankford ave., ..... Philadelphia.  
 Krider, Richard C., ..... 1406 S. 15th, ..... Philadelphia.  
 Krollpfeiffer, F. W., ..... Amber & Dauphin, ..... Philadelphia.  
 Kutcher, Chas., ..... 171 Chestnut, ..... Allegheny.  
 Kuhn, John M., ..... Mercersburg, ..... Franklin county.  
 Lacy, B. S., ..... 2327 Brown, ..... Philadelphia.  
 Lamb, Chas. F., ..... Shamokin, ..... Northumberland county.  
 Lampas, Harry G., ..... 2433 N. 11th, ..... Philadelphia.  
 Lawton, O. H., ..... 2813 Hancock, ..... Philadelphia.  
 Lebovitz, Emil, ..... Braddock, ..... Allegheny county.  
 Lecrone, E. H., ..... 2d & Hazlewood ave., ..... Pittsburgh.  
 Lehman, Allen L., ..... 15th & Market, ..... Philadelphia.  
 Lehman, Samuel W., ..... Shippensburg, ..... Cumberland county.  
 Lehr, John H., ..... 824 N. 6th, ..... Harrisburg.  
 Leib, William J., ..... 700 N. 3d, ..... Philadelphia.  
 Leopold, Samuel, ..... 1632 Franklin, ..... Philadelphia.  
 Leshner, Benj. P., ..... 24 N. 13th, ..... Philadelphia.  
 Leslie, Harry C., ..... Susquehanna, ..... Susquehanna county.  
 Lewis, A. E., ..... Hubbard, ..... Ohio.  
 Lewis, Chas. B., ..... Emigsville, ..... York county.  
 Lewis, Devoge E., ..... 3610 5th ave., ..... Pittsburgh.  
 Lewis, Fielding O., ..... 103 N. 10th, ..... Philadelphia.  
 Lewis, Griffith R., ..... Bradford, ..... McKean county.  
 Lewis, Joseph S., ..... 20th & Diamond, ..... Philadelphia.  
 Liebert, Chas. F., ..... 160 Girard ave., ..... Philadelphia.  
 Light, Given A., ..... 845 N. 48th, ..... Philadelphia.  
 Lilly, Herbert G., ..... 900 Callowhill, ..... Philadelphia.  
 Lindsay, John, ..... 1001 Wylie ave., ..... Pittsburgh.  
 Lindsey, John K., ..... Mercer, ..... Mercer county.  
 Lindsey, Thos. S., ..... Mercer, ..... Mercer county.  
 Lindsman, F. M., ..... Kittanning, ..... Armstrong county.  
 Lingenfelter, Louis, ..... 4 Dinwiddie, ..... Pittsburgh.  
 Link, Edward F., ..... 5338 Lancaster ave., ..... Philadelphia.  
 Lintner, Edwin W., ..... 1236 N. Marshall, ..... Philadelphia.  
 Littlejohn, John B., ..... 112 Parker, ..... Scranton.  
 Loeber, Frank, ..... 2154 N. 5th, ..... Philadelphia.  
 Love, James K., ..... New Castle, ..... Lawrence county.  
 Love, Thos. B., ..... 2139 Catharine, ..... Philadelphia.  
 Lower, Geo. G., ..... 2711 N. 16th, ..... Philadelphia.  
 Luebert, F. G., ..... 2340 Sharswood, ..... Philadelphia.  
 Luhr, Fred. A., ..... 1520 Peach, ..... Erie.

Lum, Wm. A., .....1926 Mervine, .....Philadelphia.  
 Lunny, John A., .....Carbondale, .....Lackawanna county.  
 Lutz, Robert E., .....1800 Market, .....Philadelphia.  
 Lynam, Francis, .....Oil City, .....Venango county.  
 Lynch, Hardie, .....33 Mervine, .....Philadelphia.  
 Lytle, Ross, .....Connellsville, .....Fayette county.  
 Lyttle, Geo. E., .....Sheridan, .....Allegheny county.  
 Mackey, J. Q., .....4099 Lancaster ave., .....Philadelphia.  
 Macouch, Emlen, .....Malvern, .....Chester county.  
 Macphee, John J., .....15th & Columbia ave., ...Philadelphia.  
 Maggini, Robert S., .....Braddock, .....Allegheny county.  
 Magowan, Mrs. Bella C.,...Kane, .....McKean county.  
 Malin, Geo. L., .....Atlantic City, .....New Jersey.  
 Malsbury, H. G., .....Woodbury, .....New Jersey.  
 Manges, W. F., .....1634 Columbia ave., .....Philadelphia.  
 Mangold, Emil E., .....64 Lowry street, .....Allegheny.  
 Mangold, Oscar G., .....64 Lowry street, .....Allegheny.  
 Markley, W. S., .....Avalon, .....Allegheny county.  
 Marsden, Josh. E., .....Towanda, .....Bradford county.  
 Marshall, Chas. G., .....1500 N. 2d, .....Philadelphia.  
 Martin, Chas. E., .....Wylandville, .....  
 Martin, Chas. E., .....649 Chestnut, .....Columbia.  
 Martin, Clayton E., .....2406 Catharine, .....Philadelphia.  
 Martin, U. P., .....Sharpsburg, .....  
 Mast, Wesley C., .....28 N. 11th, .....Reading.  
 Mathers, Grace, .....2103 Fitzwater, .....Philadelphia.  
 Mathlott, Geo. H., .....Mt. Jackson, .....Lawrence county.  
 Mauger, Harry F., .....22d & Christian, .....Philadelphia.  
 Mauger, Henry S., .....1106 Chestnut, .....Philadelphia.  
 Maxwell, Chas. H., .....Shiloh & Sycamore, .....Pittsburgh.  
 Maybury, Wm. J., .....Slippery Rock, .....Butler county.  
 McAdams, A. P., .....7 Moultrie, .....Pittsburgh.  
 McCaffey, Ward B., .....4828 Baltimore ave., .....Philadelphia.  
 McCague, E. J., .....921 Wood, .....Wilkinsburg.  
 McCanna, John M., .....24th & Federal, .....Philadelphia.  
 McCarthy, Wm., .....Hoytville, .....Tioga county.  
 McClintock, Sada C., .....801 Lincoln ave., .....Pittsburgh.  
 McConnel, John P., .....117 Bluff, .....Pittsburgh.  
 McCoy, James E., .....Media, .....Delaware county.  
 McCreary, Alice R., .....Homewood & Hami'n av., Pittsburgh.  
 McCreary, Fred. N., .....Fairview, .....Erie county.  
 McCutcheon, C. T., .....109 S. Main, .....Washington.  
 McDonough, J. R., .....Honesdale, .....Wayne county.  
 McElwain, Wm. T., .....251 N. 12th, .....Philadelphia.  
 McFadden, W. L., .....725 Park ave., .....Williamsport.  
 McFall, John A., .....526 S. 16th, .....Philadelphia.  
 McFarland, R. L., .....Sharpsville, .....Mercer county.  
 McGarrah, Wm. H., Jr., ..9th & Vine, .....Philadelphia.  
 McGill, Wm. J., Jr., .....Oakdale, .....Allegheny county.  
 McKnight, J. Irvin, .....7215 Finance street, .....Pittsburgh.  
 McLernon, Felix A., .....Conshohocken, .....Montgomery county.  
 McMillan, John C., .....New Castle, .....Lawrence county.  
 McNeill, Thos. H., .....1641 Franklin, .....Philadelphia.

McWilliams, J. A., .....Braddock, .....Allegheny county.  
 Mead, Robert L., .....Kane, .....McKean county.  
 Medley, Harry, .....Charleroi, .....Washington county.  
 Mellinger, H. E., .....Mt. Pleasant, .....Westmoreland county.  
 Mercer, J. D., .....443 3d ave., .....Pittsburgh.  
 Meredith, Chas. H., .....Bryn Mawr, .....Montgomery county.  
 Meredith, John F., .....Bellwood, .....Blair county.  
 Merdith, Wilbur C., .....500 W. Lehigh ave., .....Philadelphia.  
 Merscher, Geo. E., .....2610 N. 17th, .....Philadelphia.  
 Mervine, R. B., .....37 1st, .....Milton.  
 Merz, Alfred Wm., .....714 S. 2d, .....Philadelphia.  
 Messenger, J. D. K., .....Johnsonburg, .....  
 Metzger, Wm. A., .....217 Broad, .....Harrisburg.  
 Metzger, Wm. W., .....Honesdale, .....Wayne county.  
 Meuger, A. C., M. D., .....1500 N. 29th, .....Philadelphia.  
 Meuser, Chas. J., .....3356 N. 5th, .....Philadelphia.  
 Meyer, Gustave, .....1814 E. Allegheny ave., ..Philadelphia.  
 Meyers, Geo. A., .....Codorus, .....York county.  
 Michels, Victor C., .....2306 N. 13th, .....Philadelphia.  
 Miller, Edgar H., .....Duquesne, .....Allegheny county.  
 Miller, Geo. F., .....McDonald, .....Washington county.  
 Miller, L. J., .....938 Greenwich, .....Reading.  
 Miller, Lynford C., .....White Haven, .....Luzerne county.  
 Miller, Nelson G., .....10th & Spruce, .....Philadelphia.  
 Miller, Mrs. Mary F., .....1301 8th ave., .....Altoona.  
 Minehart, John R., .....1600 Pine, .....Philadelphia.  
 Mishkin, Jacob, .....773 S. 12th, .....Philadelphia.  
 Missimer, Harry D., .....142 S. 9th, .....Reading.  
 Mitchell, E. W., .....1000 Spring Garden, .....Philadelphia.  
 Mocherman, N. C., .....Poland, .....Ohio.  
 Mohl, August H., .....2339 Belgrade, .....Philadelphia.  
 Mooney, James E., .....3112 N. 15th, .....Philadelphia.  
 Morris, Harry A., .....McKees Rocks, .....Allegheny county.  
 Morris, Wm. T., 2d, .....2167 E. Cumberland, ....Philadelphia.  
 Morrow, Geo. S., .....Canonsburg, .....Washington county.  
 Moss, Benj. F., .....1300 S. 22d, .....Philadelphia.  
 Moyer, Howard R., .....26th & Lehigh ave., .....Philadelphia.  
 Mueller, Chas. A., .....161 N. 2d, . ....Philadelphia.  
 Muir, John R., .....820 Windsor Square, .....Philadelphia.  
 Mullen, Lee M., .....602 Penn ave., .....Wilkinsburg.  
 Mullin, John, .....Monongahela, .....Washington county.  
 Mundorf, Harry K., .....513 Spruce, .....Philadelphia.  
 Mundy, Wm. T., .....Pittston, .....Luzerne county.  
 Munson, Harry G., .....1338 S. 46th, .....Philadelphia.  
 Murphy, Wm. C., .....Mt. Pleasant, .....Westmoreland county.  
 Murray, Geo. W., .....Punxsutawney, .....Jefferson county.  
 Murrin, John, Jr., .....Butler, .....Butler county.  
 Musser, Guy M., .....4000 Chestnut, .....Philadelphia.  
 Mutty, Walter C., .....1435 N. 19th, .....Philadelphia.  
 Myers, Chas. F., .....3823 Sydenham, .....Philadelphia.  
 Myers, Luther M., .....1621 N. 11th, .....Philadelphia.  
 Naas, John P., .....6009 Penn ave., .....Pittsburgh  
 Nachman, Fred. A., .....101 Jackson, .....Allegheny.

Naley, Homer V., .....Manor Station, .....Westmoreland county.  
 Neff, Alice, .....York, .....York county.  
 Neibert, Adam, .....West Newton, .....Westmoreland county.  
 Nesbitt, A. E., .....528 N. 12th, .....Philadelphia.  
 Netherton, E. A., .....256 Scott, .....Wilkes-Barre.  
 Neubig, Chas. J., .....Rochester, .....Beaver county.  
 Neville, Wm., .....Conshohocken, .....Montgomery county.  
 Newman, S. A., .....Pittsburgh, .....Allegheny county.  
 Ney, Howard J., .....1428 Regina, .....Harrisburg.  
 Nichols, John B., .....471 N. 6th, .....Philadelphia.  
 Nick, Mary E., .....Erie, .....Erie county.  
 Nick, Wm. H. F., .....928 State, .....Erie.  
 Nicodemus, E. A., .....2150 N. 12th, .....Philadelphia.  
 Nowlin, Thos. B., .....Saxton, .....Bedford county.  
 Oberly, John S., .....22d & Market, .....Philadelphia.  
 Obley, S. Elizabeth, .....West Newton, .....Westmoreland county.  
 Ochsenhirt, Oscar N., .....610 Rebecca ave., .....Wilkes-Barre.  
 O'Conner, Chas. A., .....Wilkes-Barre, .....Luzerne county.  
 O'Donnel, Daniel C., .....Shenandoah, .....Schuylkill county.  
 O'Donnell, Hugh J., .....Homestead, .....Allegheny county.  
 Ogden, Joseph D., .....Blairsville, .....Indiana county.  
 Ohliger, Otho J., .....1701 Penn ave., .....Pittsburgh.  
 Ohning, Chas. Wm., .....1701 South street, .....Philadelphia.  
 Orr, James A., .....2057 Germantown ave., ..Philadelphia.  
 Oster, Wm. W., .....520 N. Duke, .....Lancaster.  
 Otter, Wm., Jr., .....Burlington, .....New Jersey.  
 Oyler, Wilbur C., .....Ruffsedale, .....Westmoreland county.  
 Paddock, John E., .....347 Adams ave., .....Scranton.  
 Parish, Mrs. Emma L., ..2541 Brown, .....Philadelphia.  
 Parker, James H., .....313 N. 5th, .....Reading.  
 Parvin, John P., .....2867 N. Front, .....Philadelphia.  
 Patterson, Chas. M., .....106 S. Washington, .....Wilkes-Barre.  
 Patterson, Robert A., ....Corry, .....Erie county.  
 Pearce, Ernest C., .....Avonmore, .....  
 Peck, Wm. Geo., .....2723 Mascher, .....Philadelphia.  
 Peiffer, Arthur, .....2800 Richmond, .....Philadelphia.  
 Peil, G. Wm., .....Carbondale, .....Lackawanna county.  
 Peirce, Chas. B., .....Front & Spring, .....Reading.  
 Penn, John N., .....Waynesburg, .....Greene county.  
 Penrose, Thos. W., .....1428 Diamond, .....Philadelphia.  
 Perry, Wm. A., .....Sharpsburg, .....Allegheny county.  
 Pfaff, Paul J., .....16 Vine street, .....Pittsburgh.  
 Phillips, G. Warren, .....2309 Gerret, .....Philadelphia.  
 Phillips, John H., .....26 W. Market, .....Allegheny.  
 Picking, Jacob S., Jr., ....1010 Cherry, .....Philadelphia.  
 Pierce, Thos. J., .....Frackville, .....Schuylkill county.  
 Pike, J. F., .....32 N. 9th, .....Philadelphia.  
 Piper, L. D., Jr., .....Coal Center, .....Washington county.  
 Piper, Wm. Thos., .....208 North ave., .....Allegheny.  
 Porch, J. F., M. D., .....Stahlstown, .....Wyoming county.  
 Porter, Will. M., .....Connellsville, .....Fayette county.  
 Post, Arthur E., .....5th & Morris, .....Philadelphia.  
 Potter, Thos. F., .....1224 4th ave., .....Beaver Falls.

Pratt, O. D., .....Nicholson, .....Wyoming county.  
 Prinzler, Karl A., .....1316 Sarah, .....Pittsburgh.  
 Punt, A. A. J., .....523 Kauffman, .....Philadelphia.  
 Pursel, Robert C., .....1501 Christian, .....Philadelphia.  
 Quick, J. S., .....Du Bois, .....Clearfield county.  
 Quinn, Harry L., .....2123 Mt. Vernon, .....Philadelphia.  
 Rains, Edward L., .....1400 Spruce, .....Philadelphia.  
 Ranck, Harvey M., .....80 Washington ave., ....Pittsburgh.  
 Rankin, D. M., .....Cambridge Springs, .....Crawford county.  
 Raser, Wm. H., .....156 N. 6th, .....Reading.  
 Rathmell, Albert R., ....Brownsville, .....Indiana county.  
 Reed, Geo. O., .....Haverford, .....Philadelphia.  
 Reed, Geo. P., Jr., .....626 Thompson, .....Pittsburgh.  
 Reeder, Mrs. Mary E., ...Millersville, .....Lancaster county.  
 Relce, I. Stephen, .....Bloomsburg, .....Columbia county.  
 Reickert, Louis, Jr., ....Carnegie, .....Allegheny county.  
 Reid, James V., Jr., ....Clarion, .....Clarion county.  
 Reidenbach, Chas. F., ....218 Sheridan ave., .....Pittsburgh.  
 Reinhart, John Q., .....1500 S. 13th, .....Philadelphia.  
 Reiser, Philip, .....316 Mercy, .....Philadelphia.  
 Remley, Chas. C., .....1844 Argyle, .....Philadelphia.  
 Reynolds, V. G., .....Reynoldsville, .....Jefferson county.  
 Rhoads, Harry P., .....2022 N. 11th, .....Philadelphia.  
 Rhoads, Luther K., .....406 N. 5th, .....Reading.  
 Rice, Robert G., .....Towanda, .....Bradford county.  
 Richard, John B., .....Plymouth, .....Luzerne county.  
 Ridgway, Mrs. A. M., ....1839 N. 6th, .....Harrisburg.  
 Rife, C. Norman, .....1621 N. 11th, .....Philadelphia.  
 Rigby, Harry F., .....Conneaut, .....Ohio.  
 Rinker, Wm., .....5th & Susquehanna ave.,...Philadelphia.  
 Ripka, Mrs. India S., ....Middleburg, .....  
 Roberts, De Wilton S., ..5107 Ridge ave., .....Wissahickon.  
 Robertson, H. E., Jr., ....3213 N. 17th, .....Philadelphia.  
 Robinson, Edward W., ..1934 S. 4th, .....Philadelphia.  
 Robinson, Fred. H., .....962 N. 2d, .....Philadelphia.  
 Robinson, James D., ....Shippensburg, .....Cumberland county.  
 Robinson, Warren W., ...199 S. Front, .....Milton.  
 Rogers, Tony B., .....207 Auburn, .....Pittsburgh.  
 Rogers, W. C., .....27 W. Gay, .....West Chester.  
 Rolland, Alex., Jr., .....1300 S. 2d, .....Philadelphia.  
 Roof, Frank H., .....Ellwood City, .....Lawrence county.  
 Rosenorn, Theo., .....1500 N. 5th, .....Philadelphia.  
 Ross, John F., .....Centerhall, .....Centre county.  
 Roth, Francis J., .....807 Green, .....Philadelphia.  
 Rothrock, Harry G., ....2d & Dauphin, .....Philadelphia.  
 Rouse, Wm. L., .....Monongahela, .....Washington county.  
 Saltzer, August, .....Duquesne, .....Allegheny county.  
 Sample, J. Frank, .....1626 Brown, .....Philadelphia.  
 Sapp, Wm. E., .....Dagus Mines, .....Elk county.  
 Sauer, Fred. C., .....Warren, .....Warren county.  
 Saul, Irvin E., .....1301 Columbia ave., .....Philadelphia.  
 Scarborough, Geo. W., ...Glenside, .....Montgomery county.  
 Schad, Frank C., .....2800 Germantown ave., ..Philadelphia.

Scheller, Wm. C., ..... Erie, ..... Erie county.  
 Schen, Will. J., ..... Washington, ..... Washington county.  
 Schepp, Wm. F., ..... 2967 Frankford ave., ..... Philadelphia.  
 Scherer, B. F., ..... 3806 Mt. Vernon, ..... Philadelphia.  
 Schiebel, J. W., Jr., ..... Duryea, ..... Luzerne county.  
 Schilling, Frank, ..... 1030 Green, ..... Philadelphia.  
 Schlabach, Edward, ..... 437 Hamilton, ..... Easton.  
 Schlegel, Emil, ..... 1304 McClellan, ..... Philadelphia.  
 Schlotterer, J. F., ..... Manayunk, ..... Philadelphia.  
 Schmidt, Oscar C., ..... 2024 N. 2d, ..... Philadelphia.  
 Schmuker, A. A., ..... 2101 S. 6th, ..... Philadelphia.  
 Schnee, Wm. J., ..... Mt. Carmel, ..... Northumberland county.  
 Schneider, Emil S., ..... 1744 N. 21st, ..... Philadelphia.  
 Schooley, J. G., ..... 800 Walnut, ..... Philadelphia.  
 Schotte, Karl B., ..... Kittanning, ..... Armstrong county.  
 Schroeder, M. B., ..... 300 Price, ..... Germantown.  
 Scott, Henry W., ..... 2048 Norris, ..... Philadelphia.  
 Searl, Harry H., ..... 209 N. Hicks, ..... Philadelphia.  
 Sechler, Harmon M., ..... Danville, ..... Montour county.  
 Sedlak, Chas., ..... 64 Chestnut, ..... Allegheny.  
 Seip, Chas. L., ..... 2300 Oxford, ..... Philadelphia.  
 Seipel, Harry B., ..... 874 N. 4., ..... Philadelphia.  
 Seiss, A. E., ..... 1701 S. 20th, ..... Philadelphia.  
 Seldes, Geo. S., ..... 5th & Carpenter, ..... Philadelphia.  
 Sellers, Oscar W., ..... 1019 Vine, ..... Philadelphia.  
 Semple, H. B., Jr., ..... 35 N. 34th, ..... Philadelphia.  
 Senft, Elmer E., ..... 56 N. Queen, ..... Lancaster.  
 Seyforth, Julius F., ..... Frankford, ..... Philadelphia.  
 Shafer, Clarence E., ..... 900 6th ave., ..... Altoona.  
 Shane, Samuel, ..... 1001 S. 6th, ..... Philadelphia.  
 Shannon, B. G., ..... 1417 N. 20th, ..... Philadelphia.  
 Shannon, James D., ..... Youngsville, ..... Mercer county.  
 Shapira, Isaac, ..... Mt. Carmel, ..... Northumberland county.  
 Sharp, John R., ..... Johnstown, ..... Cambria county.  
 Shaw, Samuel F., ..... 2237 Hope, ..... Philadelphia.  
 Shea, Wm. J., ..... 1814 Poplar, ..... Philadelphia.  
 Sheffer, Wm. W., ..... 4099 Lancaster ave., ..... Philadelphia.  
 Shelton, R. W., ..... 1200 Frankford ave., ..... Philadelphia.  
 Shields, Percy W., ..... West Chester, ..... Chester county.  
 Shoemaker, L. C., ..... Duquesne, ..... Allegheny county.  
 Shoults, R. G., ..... 964 N. 10th, ..... Philadelphia.  
 Shull, A. B., ..... 3928 Market, ..... Philadelphia.  
 Shultz, John W., ..... Columbia, ..... Lancaster county.  
 Sibson, Wm. H., ..... 2132 S. 17th, ..... Philadelphia.  
 Sickel, Wm. A., ..... Snow Shoe, ..... Centre county.  
 Siebert, Chas. W., ..... 5600 Penn ave., ..... Pittsburgh.  
 Siggins, Frank M., ..... Meadville, ..... Crawford county.  
 Silvard, J. K., ..... New Albany, ..... Bradford county.  
 Simcox, H. L., ..... 2501 N. 18th, ..... Philadelphia.  
 Simmons, Frank W., ..... Minersville, .....  
 Simons, Harry F., ..... 6th & Diamond, ..... Philadelphia.  
 Simpson, Chas. R., ..... 900 8th ave., ..... Altoona.  
 Sisler, L. Wm., ..... Bridgeport, ..... Montgomery county.



Skeath, Geo. W., .....9th & Catharine, .....Philadelphia.  
 Skeen, Wm. R., .....McKees Rocks, .....Allegheny county.  
 Skillman, L. G., .....17th & Bainbridge, .....Philadelphia.  
 Slack, Geo. C., .....Frankford, .....Philadelphia.  
 Sleifer, Jay W., .....1008 South, .....Philadelphia.  
 Slobig, Chas. H., .....313 Diamond, .....Philadelphia.  
 Slough, Libbie O., .....845 Hamilton, .....Allentown.  
 Smart, John, .....2430 Perot, .....Philadelphia.  
 Smiley, Geo. W., .....5500 Vine, .....Philadelphia.  
 Smink, Henry G., .....6 N. Market Square, .....Shamokin.  
 Smith, A. Clark, .....Washington, .....Washington county.  
 Smith, Allen H., .....2553 N. 7th, .....Philadelphia.  
 Smith, Chas. E., .....Jeannette, .....Westmoreland county.  
 Smith, Chas. O., .....Hartleton, .....Union county.  
 Smith, Edward W., .....461 W. Chestnut, .....Washington.  
 Smith, Frank H., .....Quakertown, .....Bucks county.  
 Smith, Harry W., .....Pottstown, .....Montgomery county.  
 Smith, John B., .....5400 Germantown ave., ..Germantown.  
 Smith, John R., .....213 Calder, .....Harrisburg.  
 Smith, Justin T., .....1557 Dickson ave., .....Scranton.  
 Smith, L. Worden, .....14 S. Market, .....Shamokin.  
 Smith, R. A., .....Oil City, .....Venango county.  
 Smith, Thos. B., .....13th & Race, .....Philadelphia.  
 Smith, Walter V., .....2d & Green, .....Philadelphia.  
 Smith, W. Gordon, .....Lykens, .....Dauphin county.  
 Smyth, Karl L., .....New Castle, .....Lawrence county.  
 Snyder, Hiram W., .....Columbia, .....Lancaster county.  
 Snyder, Rollin L., .....Shippenville, .....Clarion county.  
 Snyder, Wm. H., .....13th & Market, .....Harrisburg.  
 Snyder, Wm. L., .....Media, .....Delaware county.  
 Soffel, Albert E., .....315 Smithfield, .....Pittsburgh.  
 Spangler, W. H., .....Middleburg, .....Snyder county.  
 Spayd, Henry E., .....39 E. Market, .....Wilkes-Barre.  
 Spence, C. G., .....McKees Rocks, .....Allegheny county.  
 Spence, Thos. T., .....77 Washington ave., .....Pittsburgh.  
 Spence, Wm. A., .....N. Clarendon, .....Warren county.  
 Sprague, Hugh B., .....2306 N. 13th, .....Philadelphia.  
 Sprout, Warren A., .....31 W. 4th, .....Williamsport.  
 Sprowles, W. H., .....1649 Harrison, .....Frankford.  
 Stackhouse, J. A., .....594 Bath, .....Philadelphia.  
 Stacks, Chas. M., .....Steelton, .....Dauphin county.  
 Stanger, L. A., .....4630 Penn, .....Frankford.  
 Stanton, Chas. C., .....Sharpsburg, .....Allegheny county.  
 Stauffer, Harry A., .....1317 Girard ave., .....Philadelphia.  
 Steele, Geo. E., .....Scottdale, .....Westmoreland county.  
 Steigleder, E. L., .....171 Chestnut, .....Allegheny.  
 Stein, Joseph P., .....2548 Fairhill, .....Philadelphia.  
 Steiner, E. H., .....Easton, .....Northampton county.  
 Steinmetz, Geo. C., .....Erie, .....Erie county.  
 Stengel, Arthur, .....246 S. 22d, .....Philadelphia.  
 Stern, Wm. A., .....1921 Norris, .....Philadelphia.  
 Stern, W. C. A., .....1759 N. 10th, .....Philadelphia.  
 Stidham, Wm. A., .....Vineland, .....New Jersey.

Stinson, Wm. S., .....1608 Green, .....Philadelphia.  
 Stirling, David C., .....Schwencksville, .....Montgomery county.  
 Stocks, A. H., .....York, .....York county.  
 Stoever, Harry V., .....Broad St. Sta. Pharmacy, Philadelphia.  
 Stoke, Geo. W., .....Reynoldsville, .....Jefferson county.  
 Stone, Edward B., Jr., ...Camden, .....New Jersey.  
 Storey, J. Chester, .....Phoenixville, .....Chester county.  
 Stott, H. A., .....112 Market, .....Philadelphia.  
 Stoudt, Irwin S., .....10th & Spruce, .....Philadelphia.  
 Stout, Benj. F., .....6th & Vine, .....Philadelphia.  
 Stout, Chas. E., .....1255 Mulberry, .....Harrisburg.  
 Stout, Oliver A., .....5th & Glenwood ave., ....Philadelphia.  
 Strathie, Alex. J., .....4043 Market, .....Philadelphia.  
 Strickler, Geo., Jr., .....405 Elm, .....Reading.  
 Stroh, Chas. A., .....289 William, .....Pittston.  
 Stroh, Geo. D., .....West Pittston, .....Luzerne county.  
 Strong, Mary, .....Altoona, .....Blair county.  
 Studebaker, L. H., .....1026 Parade, .....Erie.  
 Stuebner, A. J., .....404 Taylor, .....Pittsburgh.  
 Suhn, Minnie, .....515 Pine, .....Philadelphia.  
 Sutton, John D., .....2909 Kensington ave., ....Philadelphia.  
 Sutton, Mrs. Josie, .....Jeannette, .....Westmoreland county.  
 Swain, Geo. E., .....2047 S. 3d, .....Philadelphia.  
 Sweeley, J. E., .....So. Williamsport, .....Lycoming county.  
 Sweeney, Thos. J., .....1952 Wayne Terrace, ....Philadelphia.  
 Swinehart, D. H., .....61 Chestnut, .....Pottstown.  
 Sykes, Wm. W., .....Norristown, .....Montgomery county.  
 Taylor, Bessie E., .....Altoona, .....Blair county.  
 Taylor, Harris L., .....Phillipsburg, .....Centre county.  
 Taylor, Harry B., .....108 Fulton, .....Pittsburgh.  
 Terppe, Julia, .....729 Cedar ave., .....Scranton.  
 Thatcher, Aaron M., .....48th & Butler, .....Pittsburgh.  
 Thomas, Frank B., .....Johnstown, .....Cambria county.  
 Thomas, John L., .....905 Walnut, .....McKeesport.  
 Thompson, Harley S., ....Union City, .....Fayette county.  
 Thompson, Ralph, .....2254 2d ave., .....Pittsburgh.  
 Thompson, Robert A., ...Freedom, .....Beaver county.  
 Thornton, M. T., .....16th & Summer, .....Philadelphia.  
 Tiffany, Minnie E., .....Pleasant Mount, .....Wayne county.  
 Tingle, John B., .....933 Fairmount ave., .....Philadelphia.  
 Todd, Chas. K., .....3928 Market, .....Philadelphia.  
 Tomlinson, Walter, .....5201 Butler, .....Pittsburgh.  
 Touhill, James P., .....1418 Pittston ave., .....Scranton.  
 Tower, Theo. S., .....85 James, .....Allegheny.  
 Townsend, J. Percy, ....Frankford, .....Philadelphia.  
 Traub, Elmer, .....2348 N. 10th, .....Philadelphia.  
 Troxell, F. B., .....1737 Gratz, .....Philadelphia.  
 Truax, Benj. B., .....1130 Spring Garden, ....Philadelphia.  
 Tunitzky, Jacob, .....824 N. 2d, .....Philadelphia.  
 Tyler, J. Clark, .....2567 E. Norris, .....Philadelphia.  
 Tyler, Wm. W., .....1608 Green, .....Philadelphia.  
 Unangst, Stuart L., .....322 Franklin, .....Philadelphia.  
 Urffer, Samuel, .....15th & Christian, .....Philadelphia.

Van Buskirk, T. F., .....822 N. Lehigh ave., .....Philadelphia.  
 Van Cleve, Wm. C., .....Gettysburg, .....Adams county.  
 Vorgt, Arno C., .....1033 Walnut, .....Philadelphia.  
 Voorhees, Harry B., .....3741 Lancaster ave., .....Philadelphia.  
 Voss, Adolf C., .....2606 E. Allegheny ave., ..Philadelphia.  
 Waddell, Laura B. P., ...Dushore, .....Sullivan county.  
 Wadley, H. L., .....1146 W. 9th, .....Erie.  
 Waite, Henry F., .....2401 E. York, .....Philadelphia.  
 Waite, Sadie E., .....Sugar Notch, .....Luzerne county.  
 Wallace, Robert D., .....5110 S. Atlantic ave., ....Pittsburgh.  
 Walling, Adolph E. E., ..Spartansburg, .....Crawford county.  
 Walls, Henry J., .....608 Richmond, .....Philadelphia.  
 Warren, Ray, .....Elkland, .....Tioga county.  
 Wather, Philip, .....Frankford, .....Philadelphia.  
 Watson, Horace W., .....20 Chestnut, .....Allegheny.  
 Weakley, Harry M., .....Shenandoah, .....Schuylkill county.  
 Weakley, Wm. S., .....105 N. George, .....York.  
 Weaver, Christian, .....1635 Venango, .....Philadelphia.  
 Weber, Edward, .....15th & Market, .....Philadelphia.  
 Weber, Herman, .....6th & Washington ave., ..Philadelphia.  
 Weber, H. E., .....1103 Walnut, .....Philadelphia.  
 Weber, Paul J., .....325 N. 18th, .....Philadelphia.  
 Weber, Wm., .....670 N. 13th, .....Philadelphia.  
 Weirick, Ernest C., .....1276 State, .....Harrisburg.  
 Weisinger, A. J., Jr., .....Carnegie, .....Allegheny county.  
 Welch, Frank R., .....Jermyn, .....Lackawanna county.  
 Welsh, Ralph L., .....8th ave., & 19th, .....Altoona.  
 Wendle, Samuel S., .....Parkesburg, .....Chester county.  
 Wendler, J. Henry, .....4724 Liberty ave., .....Pittsburgh.  
 Wenrick, Wm. P., .....15th & Market, .....Philadelphia.  
 Wertley, Harvey L., .....Columbia av. & Franklin, Philadelphia.  
 Werts, John L., .....3173 Kensington ave., ....Philadelphia.  
 Wesley, Wm. H., .....19 Frankstown ave., ....Pittsburgh.  
 West, Geo. V., .....McKees Rocks, .....Allegheny county.  
 Weyandt, S. L., .....Murrysville, .....Westmoreland county.  
 Whilt, John H., .....Olney, .....Philadelphia.  
 White, Albert R., .....3126 Columbia ave., .....Philadelphia.  
 White, R. W., .....2138 E. York, .....Philadelphia.  
 Whitehouse, Geo. H., ....231 Frankstown ave., ....Pittsburgh.  
 Wieman, Rudolph, .....186 Market, .....Allegheny.  
 Wike, Wm. J., .....Marietta, .....Lancaster county.  
 Willey, Harry B., .....Scottdale, .....Westmoreland county.  
 Wilkinson, E. B., .....1200 W. 4th, .....Williamsport.  
 Wilkinson, Harry, .....1532 S. 15th, .....Philadelphia.  
 Williams, Geo. H., .....Berwyn, .....Chester county.  
 Williams, Joseph J., .....3126 Columbia ave., .....Philadelphia.  
 Wilson, Geo. C., Jr., .....2909 Kensington ave., ....Philadelphia.  
 Wilson, Oscar H., .....Frankford, .....Philadelphia.  
 Winkler, Oscar C., .....5th & Cambria, .....Philadelphia.  
 Winnett, W. B., .....Washington, .....Washington county.  
 Wirtz, Wm. Victor, .....Girard, .....Erie county.  
 Wiseman, W. H., .....886 N. 46th, .....Philadelphia.  
 Wismer, Isaac G., .....2524 Bouvier, .....Philadelphia.

Witman, Chas. D., .....Middletown, .....Dauphin county.  
Witmeyer, Samuel D., ....238 S. 10th, .....Philadelphia.  
Woehlcke, Henry C., .....1500 Frankford ave., .....Philadelphia.  
Woertz, Geo. A., .....202 N. 9th, .....Philadelphia.  
Wolf, Chas. A., .....625 S. 16th, .....Philadelphia.  
Wood, Philip R., Jr., .....1804 W. 3d, .....Chester.  
Woodside, John M., .....71st & Woodland ave., ...Philadelphia.  
Wotring, E. P., .....Morgantown, .....West Virginia.  
Wuller, Chas. B., .....Butler, .....Butler county.  
Yale, Ellsworth W., .....Siegfried's Bridge, .....  
Yaley, Martin Luther, ...Braddock, .....Allegheny county.  
Yoder, Edward E., .....900 Penn, .....Reading.  
Young, Alex., Jr., .....508 S. 61st, .....Philadelphia.  
Young, Annie H., .....8th & Spruce, .....Philadelphia.  
Young, Asa H., .....736 S. 13th, .....Philadelphia.  
Young, Robert C., .....Tarentum, .....Allegheny county.  
Zeller, Earl E., .....27th & Oxford, .....Philadelphia.  
Zeller, Harry L., .....1801 Master, .....Philadelphia.  
Zentner, Chas. G., .....339 Christian, .....Philadelphia.  
Ziegler, Bessie M., .....Steelton, .....Dauphin county.  
Ziegler, Chas. H., .....703 N. 10th, .....Philadelphia.  
Ziegler, Edgar K., .....2134 Norris, .....Philadelphia.  
Ziegler, Wm. L., .....Steelton, .....Dauphin county.

APPENDIX Q.

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REPORT

OF THE

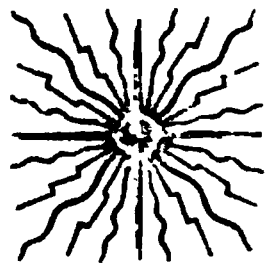
MEDICAL · COUNCIL

OF

PENNSYLVANIA.

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March 1, 1899, to March 1, 1900.



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## LETTER OF TRANSMITTAL.

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To His Excellency, William A. Stone, Governor of Pennsylvania:

Sir: I have the honor to submit herewith the third report of the Medical Council of Pennsylvania, covering its operations from March 1, 1899, to March 1, 1900.

The work of the Council and the Examining Boards has been very satisfactory during the year, and it is a pleasure to state that there is a decided awakening among the medical colleges, the medical profession and the people generally as to the necessity and desirability of higher standards in medical practice. Each year since the enactment of the law of 1893 gratifying progress has been made not only in the scientific requirements of medical students, but also in the literary qualifications. The preliminary examination now required of all applicants for examination before the State Medical Examining Boards (except those holding certificates of education that exempt them) puts a bar upon the entrance into the profession of the illiterate and incompetent. Prior to the enactment of the present law, and the application of the preliminary restrictions, entrance to the profession was practically unguarded. A diploma alone was the only requisite to registration, and the most poorly equipped college, controlled by the most incompetent faculty, had power to grant degrees in medicine equal in the rights and privileges they conferred to the degrees of the best equipped and most efficiently officered institution in the land. The college was the judge, not only of its own efficiency, but it also determined the qualifications requisite to graduation and entrance upon practice. The most illiterate persons were admitted to the colleges after a year perfunctorily spent in the study of medicine, and in many of the colleges two terms of four or five months each sufficed to secure the diploma. Under the present law, however, this has all been changed. The State, without having invaded the right of any faculty to teach medicine in any or all of its branches, has nevertheless set a barrier against the entrance to the profession of the incompetent and illiterate practitioner. The power conferred by the law has also enabled the Medical Council to inaugurate a plan by which the preliminary educational qualifications of the applicants may be advanced to a reasonable minimum of competency before licensure.



Two examinations were held during the year at which 571 applicants were examined, divided as follows: State Medical Society Board 507, Homoeopathic Board 62, Eclectic Board 13. The number passed was divided as follows: State Medical Society Board 420, Homoeopathic Board 51, Eclectic Board 13. The total number examined to date is 3,177, divided as follows: State Medical Society Board 2,741, Homoeopathic Board 388, Eclectic Board 48. Of this number 2,641 passed the examination, divided as follows: State Medical Society Board, 2,282, Homoeopathic Board 314, Eclectic Board 45. Licenses have also been issued to 84 applicants holding certificates from the state of New Jersey and 18 holding certificates from the state of New York.

The present members of the Council are:

President, Nathan C. Schaeffer, Superintendent of Public Instruction; Secretary and Treasurer, James W. Latta, Secretary of Internal Affairs; J. P. S. Gobin, Lieutenant Governor; John P. Elkin, Attorney General; John Fulton C. E., President State Board of Health and Vital Statistics; Henry Beates, Jr., M. D., President of the Medical Examining Board, representing the Medical Society of Pennsylvania; Augustus Korndoerfer, M. D., President of the Homoeopathic Medical Examining Board, representing the Homoeopathic Medical Society of the State of Pennsylvania; Henry Yeagley, M. D., President of the Eclectic Medical Board, representing the Eclectic Medical Society of the State of Pennsylvania.

The present members of the Examining Boards are:

#### State Medical Society Board.

President, Henry Beates, Jr., M. D., 1504 Walnut St., Philadelphia.  
Secretary, William S. Foster, M. D., 252 Shady Ave., Pittsburgh.  
Allen H. Hulshizer, M. D., 1419 East Susquehanna Ave., Philadelphia.  
Saml. W. Latta, M. D., 3626 Baring St., Philadelphia.  
Winters D. Hamaker, M. D., Meadville.  
Joseph K. Weaver, M. D., Norristown.  
Horace G. McCormick, M. D., Williamsport.

#### Homoeopathic Board.

President, Augustus Korndoerfer, M. D., 1728 Green St., Philadelphia.  
Secretary, Joseph C. Guernsey, M. D., 1923 Chestnut St., Philadelphia.  
Edward Cranch, M. D., Erie.  
Caleb S. Middleton, M. D., 1523 Girard Ave., Philadelphia.

Gustave A. Mueller, M. D., 400 Penn Ave., Pittsburgh.

John J. Detwiller, M. D., Easton.

Lewis H. Willard, M. D., Allegheny.

**Eclectic Board.**

President, Henry Yeagley, M. D., Lancaster.

Secretary, W. H. Blake, M. D., 2116 Mervine St., Philadelphia.

A. B. Woodward, M. D., Tunkhannock.

L. P. O'Neal, M. D., Mechanicsburg.

William Rauch, M. D., Johnstown.

C. M. Ewing, M. D., Tyrone.

J. M. Louther, M. D., Somerset.

Statistics are given herewith showing the number of applicants from each medical institution, number passed, number failed, percentage passed, percentage failed, average grade of each institution, general average grade, and the highest average obtained by any individual; also the names of the individuals, the institutions from which graduated, the school of medicine and the average grade received by each individual.

JAMES W. LATTA,  
Secretary.

Harrisburg, March 1, 1900.

STATISTICS RELATING TO THE EXAMINATIONS OF MEDICAL STUDENTS by the State Boards of Medical Examiners of Pennsylvania, showing the number examined from each institution, number passed, number failed, percentage passed, percentage failed, general average grade, average grade of each institution, and the highest average obtained by any individual.

STATE MEDICAL SOCIETY EXAMINING BOARD—June 20-23, 1899.

| Colleges.   | Number Examined. |       | Number Passed. |       | Number Failed. |       | Percentage Passed. |        | Percentage Failed. |       | Average Grade. |
|---|------------------|-------|----------------|-------|----------------|-------|--------------------|--------|--------------------|-------|----------------|
|   | M.               | F.    | M.             | F.    | M.             | F.    | M.                 | F.     | M.                 | F.    |                |
| University of Pennsylvania  | 147              | ..... | 145            | ..... | 2              | ..... | 98.64              | .....  | 1.36               | ..... | 85.59          |
| Jefferson Medical Co  | 26               | ..... | 31             | ..... | 4              | ..... | 88.57              | .....  | 11.43              | ..... | 80.87          |
| Medico-Chirurgical C  | 92               | ..... | 77             | ..... | 15             | ..... | 83.70              | .....  | 16.30              | ..... | 80.47          |
| Western Pennsylvania  | 55               | ..... | 46             | ..... | 9              | ..... | 83.64              | .....  | 16.36              | ..... | 79.46          |
| Woman's Medical Co  | .....            | 24    | .....          | 24    | .....          | ..... | 100.00             | .....  | .....              | ..... | 81.53          |
| Baltimore Medical College, Baltimore.                             | 10               | ..... | 6              | ..... | 4              | ..... | 60.00              | .....  | 40.00              | ..... | 74.12          |
| College of Physicians and Surgeons, Baltimore.                    | 5                | ..... | 4              | ..... | 1              | ..... | 80.00              | .....  | 20.00              | ..... | 74.29          |
| Baltimore University School of Medicine, Baltimore.               | 14               | ..... | 8              | ..... | 6              | ..... | 57.14              | .....  | 42.86              | ..... | 70.00          |
| University of Michigan, Ann Arbor.                                | 7                | 1     | 7              | 1     | .....          | ..... | 100.00             | 100.00 | .....              | ..... | { M. 86.08     |
| University and Bellevue Hospital Medical College, New York, N. Y. | 7                | ..... | 7              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | { F. 86.14     |
| Foreign Institutions.   | 2                | ..... | 2              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | { M. 84.18     |
| Miscellaneous.  | 22               | 4     | 11             | 4     | 11             | ..... | 50.00              | 100.00 | 50.00              | ..... | { F. 79.54     |
| Total.  | 394              | 29    | 344            | 29    | 50             | 52    | .....              | .....  | .....              | ..... | { M. 79.79     |

General average grade, male, 81.46.  
 General average grade, female, 78.48.  
 Highest average obtained.  
 Joseph Spragg Evans, Jr., University of Pennsylvania, 86.14.

## STATE MEDICAL SOCIETY EXAMINING BOARD—December 18-21, 1899.

| Colleges.             | Number Examined. |       | Number Passed. |       | Number Failed. |       | Percentage Passed. |       | Percentage Failed. |       | Average Grade. |
|-----------------------|------------------|-------|----------------|-------|----------------|-------|--------------------|-------|--------------------|-------|----------------|
|                       | M.               | F.    | M.             | F.    | M.             | F.    | M.                 | F.    | M.                 | F.    |                |
| Baltimore             | 15               | ..... | 13             | ..... | 2              | ..... | 86.67              | ..... | 13.33              | ..... | 86.44          |
| Baltimore             | 7                | ..... | 6              | ..... | 1              | ..... | 85.71              | ..... | 14.28              | ..... | 78.03          |
| University            | 17               | ..... | 9              | ..... | 8              | ..... | 52.94              | ..... | 47.06              | ..... | 71.48          |
| Howard U              | 3                | ..... | .....          | ..... | 3              | ..... | .....              | ..... | 100.00             | ..... | 70.34          |
| Foreign Institutions. | .....            | ..... | .....          | ..... | .....          | ..... | .....              | ..... | .....              | ..... | .....          |
| Miscellaneous.        | 4                | ..... | 1              | ..... | 3              | ..... | 25.00              | ..... | 75.00              | ..... | 70.14          |
| Baltimore             | 9                | ..... | 1              | ..... | 8              | ..... | 11.11              | ..... | 88.89              | ..... | 56.48          |
| University            | 4                | ..... | .....          | ..... | 4              | ..... | .....              | ..... | 100.00             | ..... | 51.75          |
| Howard U              | 3                | ..... | 2              | ..... | 1              | ..... | 66.67              | ..... | 33.33              | ..... | 72.51          |
| Foreign Institutions. | 3                | ..... | 1              | ..... | 2              | ..... | 33.33              | ..... | 66.67              | ..... | M. 70.33       |
| Miscellaneous.        | 14               | ..... | 12             | ..... | 2              | ..... | 85.71              | ..... | 14.28              | ..... | F. 50.50       |
| Total.                | 79               | ..... | 45             | ..... | 34             | ..... | .....              | ..... | .....              | ..... | M. 50.74       |
|                       |                  |       |                |       |                |       |                    |       |                    |       | F. 79.75       |

General average grade, male, 72.57.

General average grade, female, 53.53.

Highest average obtained:

Paul H. Franklin, University of Pennsylvania, 93.86.

\*One withdrew, not included in averages.

HOMOEOPATHIC MEDICAL SOCIETY EXAMINING BOARD, —June 20-23, 1899.

| Colleges.                                | Number Examined. |       | Number Passed. |       | Number Failed. |       | Percentage Passed. |        | Percentage Failed. |       | Average Grade. |
|--|------------------|-------|----------------|-------|----------------|-------|--------------------|--------|--------------------|-------|----------------|
|  | M.               | F.    | M.             | F.    | M.             | F.    | M.                 | F.     | M.                 | F.    |                |
| Hahnemann Medical College, Philadelphia. | 40               | 1     | 38             | 1     | 4              | 1     | 95.00              | 100.00 | 10.00              | ..... | 82.84          |
| .....                                    | 5                | 1     | .....          | ..... | 5              | ..... | .....              | 100.00 | 100.00             | ..... | (M 84.37       |
| .....                                    | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | (F 78.00       |
| .....                                    | .....            | 1     | .....          | ..... | .....          | ..... | .....              | .....  | .....              | ..... | 87.88          |
| .....                                    | .....            | 1     | .....          | ..... | .....          | ..... | .....              | .....  | .....              | ..... | 46.00          |
| .....                                    | .....            | 1     | .....          | ..... | .....          | ..... | .....              | .....  | .....              | ..... | 75.42          |
| .....                                    | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | 81.00          |
| .....                                    | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | 81.43          |
| .....                                    | .....            | ..... | .....          | ..... | .....          | ..... | .....              | .....  | .....              | ..... | .....          |
| Total.                                   | 46               | 3     | 39             | 2     | 9              | 1     | .....              | .....  | .....              | ..... | .....          |

General average grade, male 81.04.  
 General average grade, female 86.48.  
 Highest average obtained:  
 George Morris Golden, Hahnemann Medical College, Philadelphia, 91.23.

## HOMOEOPATHIC MEDICAL SOCIETY EXAMINING BOARD.—December 13-21, 1899.

| Colleges.           | Number Examined. |       | Number Passed. |       | Number Failed. |       | Percentage Passed. |       | Percentage Failed. |        | Average Grade. |
|---------------------|------------------|-------|----------------|-------|----------------|-------|--------------------|-------|--------------------|--------|----------------|
|                     | M.               | F.    | M.             | F.    | M.             | F.    | M.                 | F.    | M.                 | F.     |                |
| .....               | 7                | ..... | 7              | ..... | .....          | ..... | 100.00             | ..... | .....              | .....  | 83.79          |
| .....               | 2                | ..... | 2              | ..... | .....          | ..... | 100.00             | ..... | .....              | .....  | 81.67          |
| Ohio, .....         | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | ..... | .....              | .....  | 88.28          |
| Illmore, Md., ..... | .....            | 1     | .....          | ..... | .....          | 1     | .....              | ..... | .....              | 100.00 | 83.28          |
| Total, .....        | 10               | 1     | 10             | ..... | .....          | 1     | .....              | ..... | .....              | .....  | .....          |

General average grade, male, 84.30  
General average grade, female, 83.28.

Highest average obtained:

Robert Hamilton Woodruff, Hahnemann Medical College, Philadelphia, 96.00.

## ECLECTIC MEDICAL SOCIETY EXAMINING BOARD—June 20-23, 1899.

| Colleges.   | Number Examined. |       | Number Passed. |       | Number Failed. |       | Percentage Passed. |        | Percentage Failed. |       | Average Grade.       |
|---|------------------|-------|----------------|-------|----------------|-------|--------------------|--------|--------------------|-------|----------------------|
|   | M.               | F.    | M.             | F.    | M.             | F.    | M.                 | F.     | M.                 | F.    |                      |
| .....   | 5                | 1     | 5              | 1     | .....          | ..... | 100.00             | 100.00 | .....              | ..... | [M 87.64<br>F. 87.70 |
| .....   | 2                | ..... | 2              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | 84.20                |
| Georgia College of Eclectic M and S., Atlanta, Ga., ..... | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | 82.10                |
| University of the South, Sewanee, Tenn., .....            | 1                | ..... | 1              | ..... | .....          | ..... | 100.00             | .....  | .....              | ..... | 81.10                |
| Physio-Medico College of Indiana, .....                   | .....            | ..... | .....          | ..... | .....          | ..... | .....              | .....  | .....              | ..... | .....                |
| Total, .....  | 9                | 1     | 9              | 1     | .....          | ..... | .....              | .....  | .....              | ..... | .....                |

General average grade, male, 86.64.

General average grade, female, 87.80.

Highest average obtained:

Edward Franklin Bittner, Eclectic Medical Institute, Cincinnati, O., 93.00.

ECLECTIC MEDICAL SOCIETY BOARD.—December 18-21, 1899.

| Colleges.   | Number.<br>Examined. |       | Number.<br>Passed. |       | Number.<br>Failed. |       | Percentage.<br>Passed. |       | Percentage.<br>Failed. |       | Average<br>Grade. |
|---|----------------------|-------|--------------------|-------|--------------------|-------|------------------------|-------|------------------------|-------|-------------------|
|   | M.                   | F.    | M.                 | F.    | M.                 | F.    | M.                     | F.    | M.                     | F.    |                   |
| Eclectic Medical Institute, Cincinnati, O., ..... | 2                    | ..... | 2                  | ..... | .....              | ..... | 100.00                 | ..... | .....                  | ..... | 80.65             |
| Rush Medical College, Chicago, Ill., .....        | 1                    | ..... | 1                  | ..... | .....              | ..... | 100.00                 | ..... | .....                  | ..... | 79.40             |
| Total, .....                                      | 3                    | ..... | 3                  | ..... | .....              | ..... | .....                  | ..... | .....                  | ..... | .....             |

General average grade, male, 80.23.  
Highest average obtained:  
Elmer J. Dech, Eclectic Medical Institute, Cincinnati, O., 83.00.



# LIST OF PERSONS EXAMINED BY THE STATE MEDICAL EXAMINING BOARDS.

Showing those to whom licenses have been granted by the Medical Council of Pennsylvania, and also indicating the failures (without names of individuals), the colleges from which examinees were graduated, and the individual averages. The different schools of medicine are designated as follows: (1) Allopathic; (2) Homoeopathic; (3) Eclectic.

| Names.                          | Colleges.   | Averages. |
|---------------------------------|---|-----------|
| <b>1899:</b>                    |   |           |
| Abrahamson, Philip, .....       | Jefferson Medical College (1), .....                                      | 82.07     |
| Alexander, Hugh S., .....       | Baltimore University School of Medicine (1), .....                        | 75.00     |
| Allen, Henry Croskey, .....     | Hahnemann Medical College, Philadelphia (2), .....                        | 77.28     |
| Allen, Sara Frances, .....      | Hering Medical College and Hospital, Chicago, Ill. (2), .....             | 75.42     |
| Allison, Charles Edward, .....  | Jefferson Medical College (1), .....                                      | 86.50     |
| .....                           | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 58.29     |
| Anderson, Axel Mauritz, ...     | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                   | 79.80     |
| Anderson, Ben Hooke, .....      | Medico-Chirurgical College, Philadelphia (1), .....                       | 88.00     |
| Anderson, Guy Roland, ....      | University of Pennsylvania (1), .....                                     | 86.78     |
| Anderson, Joseph Wilson, ..     | University of Pennsylvania (1), .....                                     | 87.50     |
| Arnold, John Sheridan, .....    | College of P. and S., Baltimore, Md. (1), .....                           | 80.29     |
| Aspey, Lewis Sutton, .....      | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 81.92     |
| .....                           | Royal University of Naples, Italy (1), .....                              | 61.57     |
| .....                           | Starling Medical College, Columbus, Ohio (1), .....                       | 63.86     |
| Bardwell, Stoddard William, ..  | Georgia College of Eclectic Medicine and Surgery, Atlanta (3), .....      | 83.60     |
| Barnes, Charles Stewart, ....   | Jefferson Medical College (1), .....                                      | 92.50     |
| Barnhart, Henry Byers, ....     | University of Pennsylvania (1), .....                                     | 85.36     |
| Barron, Charles Albert, ....    | Hahnemann Medical College, Philadelphia (2), .....                        | 88.28     |
| Barrow, Robert Burton, ....     | University College of Medicine, Richmond Va. (1), ....                    | 81.79     |
| Barry, Chester Le Roy, .....    | University of Pennsylvania (1), .....                                     | 85.07     |
| .....                           | Sewanee Medical College University of the South, Sewanee, Tenn. (1) ..... | 56.07     |
| .....                           | Sewanee Medical College University of the South, Sewanee, Tenn. (1) ..... | 48.36     |
| Beaver, Matilda, .....          | Woman's Medical College of Pennsylvania (1), .....                        | 78.86     |
| Beggs, David B., .....          | Jefferson Medical College (1), .....                                      | 84.79     |
| Behrend, Moses, .....           | University of Pennsylvania (1), .....                                     | 85.64     |
| Reil, Fred. Wilson, .....       | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 81.86     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 65.79     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 61.22     |
| Benson, Joseph Philip, .....    | Medico-Chirurgical College, Philadelphia (1), .....                       | 76.98     |
| Best, Margaret Blanche, ....    | Trinity University, Medical Department, Toronto (1), ..                   | 90.50     |
| Bingaman, Walter Slagle, ...    | Hahnemann Medical College, Philadelphia (2), .....                        | 85.43     |
| Bishop, Frederick John, ....    | Medico-Chirurgical College, Philadelphia (1), .....                       | 86.00     |
| Bitler, Joseph Clarence, ....   | Hahnemann Medical College, Philadelphia (2), .....                        | 78.28     |
| Bittner, Charles Russell, ....  | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                   | 87.80     |
| Bittner, Edward Franklin, ..    | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                   | 93.00     |
| Black, Dareall Grant, .....     | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 80.60     |
| Black, John Torrington, ....    | Hahnemann Medical College, Philadelphia (2), .....                        | 89.71     |
| Blackford, Robert A., .....     | University of Pennsylvania (1), .....                                     | 87.07     |
| Blessing, Frank Carl Schurz, .. | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 85.64     |
| Blitzstein, Rosalie M., .....   | Woman's Medical College of Pennsylvania (1), .....                        | 77.50     |
| Bogart, Arthur Emerson, ....    | University of Pennsylvania (1), .....                                     | 84.93     |
| Bolan, Herbert A., .....        | University of Pennsylvania (1), .....                                     | 80.00     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 66.50     |
| Boothe, John Henry, .....       | Medico-Chirurgical College, Philadelphia (1), .....                       | 75.07     |
| Borger, Otto Peter, .....       | University of Pennsylvania (1), .....                                     | 87.21     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 56.93     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 51.43     |
| Bostock, Herbert Arthur, ...    | Jefferson Medical College (1), .....                                      | 81.36     |
| Boyd, Harry Wilson, .....       | University of Pennsylvania (1), .....                                     | 88.00     |
| .....                           | Medico-Chirurgical College, Philadelphia (1), .....                       | 53.43     |
| Brallier, Stanley Allen E., ... | Medico-Chirurgical College, Philadelphia (1), .....                       | 85.07     |
| Brav, Herman Abraham, ..        | Medico-Chirurgical College, Philadelphia (1), .....                       | 79.64     |
| Breed, Maurice Edwards, ....    | University of Pennsylvania (1), .....                                     | 85.07     |
| Brick, Benjamin Kain, ....      | University of Pennsylvania (1), .....                                     | 90.50     |
| .....                           | Jefferson Medical College (1), .....                                      | 66.42     |
| Brister, Samuel, .....          | Baltimore University School of Medicine (1), .....                        | 75.86     |
| Brittingham, James D., .....    | Medico-Chirurgical College, Philadelphia (1), .....                       | 81.14     |
| Brown, Alexander MacLeod, ...   | University of Pennsylvania (1), .....                                     | 90.94     |
| Brown Frederick William, ...    | University of Michigan, Medical Department, Ann Arbor (1), .....          | 86.07     |
| Brown, John Robert, .....       | Western Pennsylvania Medical College, Pittsburgh (1), .....               | 81.57     |
| Brown, Jr., Samuel Horton, ..   | University of Pennsylvania (1), .....                                     | 84.36     |
| Browne, William Campbell, ...   | Hahnemann Medical College, Philadelphia (2), .....                        | 84.71     |
| Brown, William W., .....        | Washington University, Baltimore, Md. (1), .....                          | 75.43     |
| Browse, Henry Nicholas, ....    | University of Pennsylvania (1), .....                                     | 86.36     |
| Buchanan, Mary, .....           | Woman's Medical College of Pennsylvania (1), .....                        | 85.29     |
| .....                           | College of P. and S., Baltimore, Md. (1), .....                           | 57.79     |
| .....                           | Cleveland Medical College, Cleveland, O. (2), .....                       | 47.71     |
| Burhenn, Charles George, ...    | Western Pennsylvania Medical College, Pittsburgh (1), ..                  | 80.36     |

## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                | Colleges.  | Averages. |
|---------------------------------------|--|-----------|
| Butz, Jacob Treichler, .....          | University of Pennsylvania (1), .....                                    | 75.00     |
| .....                                 | University of Pennsylvania (1), .....                                    | 70.07     |
| Byrne, Thomas Joseph, .....           | University of Pennsylvania (1), .....                                    | 88.79     |
| Caldwell, John Dean, .....            | University of Pennsylvania (1), .....                                    | 88.36     |
| Callahan, Jr., Andrew, .....          | Medico-Chirurgical College, Philadelphia (1), .....                      | 88.36     |
| Cameron, William Herron, .....        | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 80.21     |
| Campbell, William M., .....           | University of Pennsylvania (1), .....                                    | 81.29     |
| Carnett, John Berton, .....           | University of Pennsylvania (1), .....                                    | 93.50     |
| Carnochan, John McDowell, .....       | Medico-Chirurgical College, Philadelphia (1), .....                      | 82.93     |
| Carty, Harry B., .....                | Medico-Chirurgical College, Philadelphia (1), .....                      | 85.07     |
| Cassidy, Paul B., .....               | University of Pennsylvania (1), .....                                    | 88.86     |
| Catterson, Alden Dudley, .....        | Medico-Chirurgical College, Philadelphia (1), .....                      | 85.43     |
| Cavanagh, Charles Joseph, .....       | Jefferson Medical College (1), .....                                     | 83.97     |
| (Sick), .....                         | Medico-Chirurgical College, Philadelphia (1), .....                      | 19.93     |
| Chambers, William Henry, .....        | College of P. and S., Chicago, Ill. (1), .....                           | 87.21     |
| Chess, Jr., Moses, .....              | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 76.86     |
| Chiavaro, Angelo, .....               | Royal Superior Institute, Florence, Italy (1), .....                     | 76.93     |
| Clark, Cunningham P., .....           | Jefferson Medical College (1), .....                                     | 82.86     |
| Clarke, Samuel, .....                 | Jefferson Medical College (1), .....                                     | 83.50     |
| Clawson, Frank Allison, .....         | Chicago Homoeopathic Medical College, Chicago, Ill. (2), .....           | 81.00     |
| Clemens, Jr., Francis, .....          | University of Pennsylvania (1), .....                                    | 81.93     |
| Cleveland, Francis Mortimer, .....    | Jefferson Medical College (1), .....                                     | 88.36     |
| Clyde, Harry Edwards, .....           | Medico-Chirurgical College, Philadelphia (1), .....                      | 75.79     |
| Coates, Thomas Gordon, ....           | Howard University, Medical Department, Washington, D. C. (1), .....      | 75.00     |
| Collins, Foster K., .....             | Medico-Chirurgical College, Philadelphia (1), .....                      | 87.21     |
| Comerer, Jacob Alvin, .....           | Baltimore Medical College, Baltimore, Md. (1), .....                     | 80.79     |
| Conant, Mary Chilton, .....           | Woman's Medical College of Pennsylvania (1), .....                       | 82.14     |
| Cook, William Franklin, .....         | Hahnemann Medical College, Philadelphia (2), .....                       | 75.28     |
| Cooper, John Andrew, .....            | Medico-Chirurgical College, Philadelphia (1), .....                      | 75.64     |
| Coss, Walter LeRoy, .....             | Hahnemann Medical College, Philadelphia (2), .....                       | 87.86     |
| .....                                 | Western Reserve University, Medical Department, Cleveland, O. (1), ..... | 73.29     |
| Coughlin, Oli, .....                  | Woman's Medical College of Pennsylvania (1), .....                       | 80.82     |
| Cowan, Walter Howard, .....           | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 76.36     |
| Cox, Joseph Reynolds, .....           | Cleveland University of M. and S., Cleveland, O. (2), .....              | 81.43     |
| Crawford, James Rea, .....            | University of Pennsylvania (1), .....                                    | 90.29     |
| Crawford, James Slater, ....          | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 81.07     |
| Cregar, Peter Bodine, .....           | University of Pennsylvania (1), .....                                    | 92.14     |
| Critcheld, John Burnworth, .....      | Medico-Chirurgical College, Philadelphia (1), .....                      | 83.43     |
| Croft, Clarence Clifton, ....         | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 85.64     |
| Croft, John Walker, .....             | Jefferson Medical College (1), .....                                     | 77.64     |
| Crothers, Lewis Haines, .....         | University of Pennsylvania (1), .....                                    | 87.50     |
| Crouthamel, Joseph F., .....          | Hahnemann Medical College, Philadelphia (2), .....                       | 80.00     |
| Crow, Samuel Conway, .....            | University of Michigan, Medical Department, Ann Arbor (1), .....         | 85.00     |
| .....                                 | Hahnemann Medical College, Philadelphia (2), .....                       | 73.14     |
| Curtis, Frederic Chester, .....       | University of Pennsylvania (1), .....                                    | 82.29     |
| Cushing, Herbert Howard, .....        | Jefferson Medical College (1), .....                                     | 87.98     |
| Darlington, Emlen Painter, .....      | University of Pennsylvania (1), .....                                    | 84.29     |
| Darrah, Percival Walter, .....        | University of Pennsylvania (1), .....                                    | 92.29     |
| .....                                 | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 69.07     |
| Davies, William Rowland, .....        | University of Pennsylvania (1), .....                                    | 87.50     |
| Davis, Edward Lowndes, ...            | University of Pennsylvania (1), .....                                    | 87.21     |
| Davis, Harry Thomas, .....            | University of Pennsylvania (1), .....                                    | 78.29     |
| .....                                 | Western Pennsylvania Medical College, Pittsburgh (1), .....              | 72.07     |
| Davison, Robert E., .....             | University of the South, Sewanee, Tenn. (1), .....                       | 54.43     |
| Day, Howard Woods, .....              | University of Pennsylvania (1), .....                                    | 85.57     |
| .....                                 | Northwestern University Medical College, Chicago, Ill. (1), .....        | 77.43     |
| Dech, Elmer J., .....                 | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                  | 83.00     |
| DeLaney, Matthew Augustus, .....      | University of Pennsylvania (1), .....                                    | 86.57     |
| Delmore, Margaret J., .....           | Woman's Medical College of Pennsylvania (1), .....                       | 75.71     |
| DeMeritt, Charles Law, ....           | Baltimore Medical College, Baltimore, Md. (1), .....                     | 85.07     |
| Dengler, Clarence Keller, .....       | University of Pennsylvania (1), .....                                    | 89.79     |
| Dickey, John DeWitt, .....            | Hahnemann Medical College, Philadelphia (2), .....                       | 80.43     |
| Dickinson, Breese Morse, .....        | University of Pennsylvania (1), .....                                    | 91.71     |
| Dickinson, James Edward, .....        | University of Pennsylvania (1), .....                                    | 91.57     |
| Dicks, Joseph Oscar, .....            | Hahnemann Medical College, Philadelphia (2), .....                       | 85.28     |
| Dix, J. Morgan, .....                 | Baltimore University, School of Medicine (1), .....                      | 75.16     |
| Donaldson, Albert Barnes, .....       | University of Pennsylvania (1), .....                                    | 87.93     |
| Doncaster, William H., .....          | American Eclectic Medical College, Cincinnati, O. (1), .....             | 79.36     |
| .....                                 | Marion-Sims College of Medicine, St. Louis, Mo. (1), .....               | 87.93     |
| .....                                 | Baltimore University School of Medicine (1), .....                       | 73.29     |
| Dunnick, Joseph Nelson, .....         | Baltimore Medical College, Baltimore, Md. (1), .....                     | 80.07     |
| Dye, Frank Hazzard, .....             | University of Pennsylvania (1), .....                                    | 84.86     |
| Eichmann, Joseph Francis, .....       | Hahnemann Medical College, Philadelphia (2), .....                       | 84.57     |
| Eisenberg, John Laurence Dawes, ..... | University of Pennsylvania (1), .....                                    | 83.14     |
| Ellison, George Washington, .....     | Cleveland Medical College, Cleveland, O. (2), .....                      | 75.00     |
| Elmer, Macomb Kean, .....             | University of Pennsylvania (1), .....                                    | 78.00     |
| .....                                 | Cleveland Medical College, Cleveland, O. (2), .....                      | 69.00     |
| Ennis, Joseph, .....                  | University of Pennsylvania (1), .....                                    | 88.50     |
| .....                                 | University of the South, Sewanee, Tenn. (1), .....                       | 68.14     |
| .....                                 | Baltimore Medical College, Baltimore, Md. (1), .....                     | 71.86     |

## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                 | Colleges.   | Averages. |
|--|---|-----------|
| .....                                  | University of the South, Sewanee, Tenn. (1), .....                      | 58.50     |
| .....                                  | Baltimore Medical College, Baltimore, Md. (1), .....                    | 71.07     |
| Evans, Daniel Webster, ....            | College of P. and S., Chicago, Ill. (1), .....                          | 87.21     |
| Evans, David Richard, .....            | Western Pennsylvania Medical College, Pittsburgh (1), .....             | 84.34     |
| Evans, Edward Ellis, .....             | New York Homoeopathic Medical College and Hospital, New York (2), ..... | 87.86     |
| Evans, George Oliver, .....            | University of Pennsylvania (1), .....                                   | 87.50     |
| Evans, Jr., Joseph Spragg, ..          | University of Pennsylvania (1), .....                                   | 96.14     |
| Evans, Roscoe, .....                   | Western Pennsylvania Medical College, Pittsburgh (1), .....             | 85.43     |
| Evans, Thomas Horace, ....             | University of Pennsylvania (1), .....                                   | 86.57     |
| Falk, Harry S., .....                  | Medico-Chirurgical College, Philadelphia (1), .....                     | 86.14     |
| Fassett, Burton W., .....              | Baltimore Medical College, Baltimore, Md. (1), .....                    | 80.57     |
| Faunce, Matthew D., .....              | Hahnemann Medical College, Philadelphia (2), .....                      | 86.00     |
| Feldt, Wilson Wellington, ..           | University of Pennsylvania (1), .....                                   | 86.29     |
| Ferguson, Robert J., .....             | Hahnemann Medical College, Philadelphia (2), .....                      | 77.71     |
| Fetterhoof, Harry Burket, ..           | Hahnemann Medical College, Philadelphia (2), .....                      | 83.57     |
| Fetterman, Jr., Wilfrid Bernard, ..... | University of Pennsylvania (1), .....                                   | 88.71     |
| .....                                  | Indiana Medical College, Indianapolis (1), .....                        | 73.64     |
| Fisher, William Endy, .....            | University of Pennsylvania (1), .....                                   | 86.43     |
| Fly, Robert Judson, .....              | University of Pennsylvania (1), .....                                   | 83.20     |
| Flynn, John Cajetan, .....             | University of Pennsylvania (1), .....                                   | 87.80     |
| Fox, William Wellington, ..            | University of Pennsylvania (1), .....                                   | 84.21     |
| Franco, Crucita Marie, .....           | Woman's Medical College of Pennsylvania (1), .....                      | 80.29     |
| Fraley, Jr., Frederick, .....          | University of Pennsylvania (1), .....                                   | 85.29     |
| Frankel, Jacob J., .....               | Medico-Chirurgical College, Philadelphia (1), .....                     | 80.36     |
| Franklin, Paul H., .....               | University of Pennsylvania (1), .....                                   | 93.36     |
| Free, Evans Murphy, .....              | College of P. and S., Baltimore, Md. (1), .....                         | 77.21     |
| Funk, Joseph, .....                    | Jefferson Medical College (1), .....                                    | 78.00     |
| Furnee, Charles Henry, .....           | Vanderbilt University, Nashville, Tenn. (1), .....                      | 77.64     |
| Gandy, Raymond Reeves, .....           | University of Pennsylvania (1), .....                                   | 86.57     |
| Gardner, Charlotte Bell, ....          | Woman's Medical College of Pennsylvania (1), .....                      | 80.50     |
| Gardner, Lee B., .....                 | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                 | 78.30     |
| Gardner, William Homer, ..             | Western Pennsylvania Medical College, Pittsburgh (1), .....             | 87.14     |
| .....                                  | Medico-Chirurgical College, Philadelphia (1), .....                     | 66.71     |
| Gay, Henry Milus, .....                | Hahnemann Medical College, Philadelphia (2), .....                      | 87.00     |
| .....                                  | Western Pennsylvania Medical College, Pittsburgh (1), .....             | 66.59     |
| Geddes, Charles Patterson, ..          | Cleveland University of M. and S., Cleveland, Ohio (2), .....           | 93.28     |
| Geisler, Howard Dickes, ....           | University of Pennsylvania (1), .....                                   | 89.73     |
| .....                                  | Western Pennsylvania Medical College, Pittsburgh (1), .....             | 69.43     |
| .....                                  | Baltimore University School of Medicine, Baltimore, Md. (1), .....      | 67.93     |
| .....                                  | Baltimore University School of Medicine, Baltimore, Md. (1), .....      | 71.07     |
| Gengenbach, Frank Paul, ..             | University of Pennsylvania (1), .....                                   | 89.14     |
| Gildersleve, Jr., George Henry, .....  | University of Pennsylvania (1), .....                                   | 84.71     |
| .....                                  | Medico-Chirurgical College, Philadelphia (1), .....                     | 71.21     |
| Gilmour, Samuel Baird, ....            | University of Pennsylvania (1), .....                                   | 90.86     |
| Glenn, Milton Lowrie, .....            | University of Michigan, Medical Department, Ann Arbor (1), .....        | 78.79     |
| Glosser, Herbert Hartman, ..           | University of Michigan, Medical Department, Ann Arbor (1), .....        | 88.66     |
| .....                                  | Hahnemann Medical College, Philadelphia (2), .....                      | 91.28     |
| Golden, George Morris, .....           | University of Michigan, Medical Department, Ann Arbor (1), .....        | 88.71     |
| Goldsmith, Milton, .....               | Columbian University, Washington, D. C. (1), .....                      | 77.57     |
| Goodall, Ellis Leon, .....             | Medico-Chirurgical College, Philadelphia (1), .....                     | 89.07     |
| Gordner, John Franklin, ....           | University of Bologna, Italy (1), .....                                 | 69.14     |
| .....                                  | University of Pennsylvania (1), .....                                   | 84.43     |
| Gorham, Fordyce Clark, ...             | Medico-Chirurgical College, Philadelphia (1), .....                     | 77.29     |
| Gottschalk, Leon, .....                | University of Pennsylvania (1), .....                                   | 92.93     |
| Green, George Dorsey, .....            | University of Pennsylvania (1), .....                                   | 91.50     |
| Greer, Robert Bruce, .....             | Medico-Chirurgical College, Philadelphia (1), .....                     | 86.43     |
| Gregory, Henry Ward, .....             | Woman's Medical College of Pennsylvania (1), .....                      | 86.50     |
| Grim, Ella Williams, .....             | Jefferson Medical College (1), .....                                    | 81.64     |
| Gross, Herbert Franklin, ...           | Western Reserve University, Cleveland, O. (1), .....                    | 80.71     |
| Grossman, Robert James, ...            | Medico-Chirurgical College, Philadelphia (1), .....                     | 85.00     |
| Gruhier, Christian, .....              | University of Pennsylvania (1), .....                                   | 89.86     |
| Grushlaw, Israel, .....                | Medico-Chirurgical College, Philadelphia (1), .....                     | 88.00     |
| Guion, Edward, .....                   | Hahnemann Medical College, Philadelphia (2), .....                      | 85.71     |
| Hadley, Charles Frazer, ....           | Medico-Chirurgical College, Philadelphia (1), .....                     | 83.71     |
| Haentze, Edward, .....                 | Hahnemann Medical College, Philadelphia (2), .....                      | 90.43     |
| Haerer, Jacob Hollingsworth            | Baltimore University School of Medicine, Baltimore, Md. (1), .....      | 76.88     |
| Hall, Bret Harte, .....                | University of Pennsylvania (1), .....                                   | 92.29     |
| Halloran, Paul Stacy, .....            | .....   | .....     |
| Halverstadt, Charles Howard, .....     | Western University of Pennsylvania, Pittsburgh (1), ..                  | 75.86     |
| .....                                  | Western University of Pennsylvania, Pittsburgh (1), ..                  | 69.93     |
| .....                                  | Western University of Pennsylvania, Pittsburgh (1), ..                  | 78.79     |
| Hart, Charles Avery, .....             | Jefferson Medical College (1), .....                                    | 65.07     |
| .....                                  | Medico-Chirurgical College, Philadelphia (1), .....                     | 72.36     |
| Hartman, Jr., John Conrad, ..          | Western University of Pennsylvania, Pittsburgh (1), ..                  | 80.93     |
| Heard, Corydon Ford, .....             | University of Michigan, Medical Department, Ann Arbor (1), .....        | 87.30     |
| .....                                  | Jefferson Medical College (1), .....                                    | 86.86     |
| Hearn, William Prettyman, ..           | .....   | .....     |
| Hebsacker, William Frederick, ..       | Jefferson Medical College (1), .....                                    | 82.57     |

## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                   | Colleges.   | Averages. |
|--|---|-----------|
| Hedding, Benjamin Edgar,...              | University of Pennsylvania (1), .....   | 89.07     |
| Hellman, Daniel Franklin,...             | Medico-Chirurgical College, Philadelphia (1), .....                             | 82.86     |
| .....                                    | Jefferson Medical College (1), .....  | 58.50     |
| Heller, Samuel Hess, .....               | University of Pennsylvania (1), .....   | 82.43     |
| Hemphill, Frederic Alter,...             | Hahnemann Medical College, Philadelphia (2), .....                              | 86.14     |
| Hendrixon, Lewis Holston,...             | Hahnemann Medical College, Philadelphia (2), .....                              | 85.00     |
| Henry, A. Jay, .....                     | Western University of Pennsylvania, Pittsburgh (1),...                          | 82.29     |
| Henry, Charles Oscar, .....              | Medico-Chirurgical College, Philadelphia (1), .....                             | 87.79     |
| Hervey, William E., .....                | Medical College of Ohio, Cincinnati, O. (1), .....                              | 81.14     |
| Holden, Charles Dickes, .....            | Hahnemann Medical College, Philadelphia (2), .....                              | 88.86     |
| Hornecker, John Carl, .....              | Hahnemann Medical College, Philadelphia (2), .....                              | 88.00     |
| .....                                    | Baltimore Medical College, Baltimore, Md. (1), .....                            | 62.57     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                          | 62.57     |
| .....                                    | Medical College of Ohio, Cincinnati, Ohio (1), .....                            | 68.79     |
| Higgins, William Gerald,...              | Medico-Chirurgical College, Philadelphia (1), .....                             | 78.64     |
| High, William Beldler, .....             | University of Pennsylvania (1), .....   | 86.21     |
| .....                                    | Jefferson Medical College (1), .....  | 68.00     |
| Hillard, Thomas R., .....                | College of P. and S., Chicago, Ill. (1), .....                                  | 81.86     |
| Hindman, Audley Oliver,...               | Western University of Pennsylvania, Pittsburgh (1),...                          | 80.21     |
| Hirschler, Rose, .....                   | Woman's Medical College of Pennsylvania (1), .....                              | 80.50     |
| Hodge, Jr., Edward Blan-<br>chard, ..... | University of Pennsylvania (1), .....   | 88.50     |
| Hoeh, David B., .....                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 89.07     |
| Hollister, Frederic Purdy,...            | University of Pennsylvania (1), .....   | 88.86     |
| Hooper, Harriet Pervler,...              | College of P. and S., Boston, Mass. (1), .....                                  | 75.00     |
| Hoover, Percy Daniel, .....              | University of Pennsylvania (1), .....   | 86.00     |
| .....                                    | University of Louisville, Louisville, Ky. (1), .....                            | 68.21     |
| Horning, Henry, .....                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 79.07     |
| Houck, William James, .....              | Medico-Chirurgical College, Philadelphia (1), .....                             | 81.86     |
| Howard, Frederic Hollis,...              | University of Pennsylvania (1), .....   | 87.00     |
| Howell, William Henry,...                | University of Pennsylvania (1), .....   | 87.86     |
| .....                                    | Baltimore Medical College, Baltimore, Md. (1), .....                            | 68.79     |
| Humphreys, Harry Gass,...                | University of Pennsylvania (1), .....   | 85.98     |
| Hutchinson, A. Dunbar, ....              | University of Pennsylvania (1), .....   | 87.29     |
| Hutton, Charles Fremont,...              | Medical College of Ohio, Cincinnati (1), .....                                  | 81.86     |
| .....                                    | University of Pennsylvania (1), .....   | 74.00     |
| Ingham, Samuel D., .....                 | Medico-Chirurgical College, Philadelphia (1), .....                             | 88.86     |
| Irwin, James Willoughby,...              | University of Pennsylvania (1), .....   | 87.86     |
| .....                                    | Jefferson Medical College (1), .....  | 57.43     |
| Jackson, Edwin David, .....              | Western University of Pennsylvania, Pittsburgh (1),...                          | 80.14     |
| Jackson, Joseph Maurice,...              | Columbia College, New York (1), .....   | 84.21     |
| James, Uriah A., .....                   | University of Pennsylvania (1), .....   | 90.43     |
| Johnson, Jr., Josiah Barton,             | Western University of Pennsylvania, Pittsburgh (1),...                          | 88.94     |
| Jones, Thomas Cushing, .....             | University of Pennsylvania (1), .....   | 84.50     |
| Jordy, George Harry, .....               | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....           | 79.50     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 86.64     |
| Jungmann, Emil, .....                    | University of Pennsylvania (1), .....   | 84.79     |
| Kane, James Asheton Bay-<br>ard, .....   | Medico-Chirurgical College, Philadelphia (1), .....                             | 68.86     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 72.07     |
| .....                                    | University of Pennsylvania (1), .....   | 90.43     |
| Keim, William Franklin,...               | Medico-Chirurgical College, Philadelphia (1), .....                             | 58.43     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                          | 69.64     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....           | 40.43     |
| Kerr, J. French, .....                   | Western University of Pennsylvania, Pittsburgh (1),...                          | 82.93     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....           | 25.57     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....           | 60.64     |
| Kieffer, Elmer C., .....                 | Medico-Chirurgical College, Philadelphia (1), .....                             | 75.07     |
| Kobler, Henry Blttinger,...              | Medico-Chirurgical College, Philadelphia (1), .....                             | 81.57     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 67.86     |
| Kohn, Bernard, .....                     | University of Pennsylvania (1), .....   | 88.93     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 69.86     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                             | 62.21     |
| Kurtz, Walter James, .....               | Medico-Chirurgical College, Philadelphia (1), .....                             | 85.71     |
| Kulp, Horace Landes, .....               | Hahnemann Medical College, Philadelphia (2), .....                              | 82.71     |
| Lackey, Howard Julian,...                | Hahnemann Medical College, Philadelphia (2), .....                              | 88.71     |
| Lackey, Joseph Warren,...                | University and Bellevue Hospital Medical College,<br>New York, N. Y. (1), ..... | 83.80     |
| .....                                    | University of the South, Sewanee, Tenn. (1), .....                              | 45.72     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                          | 72.50     |
| Lane, Lauriston Job, .....               | University of Pennsylvania (1), .....   | 90.36     |
| Langham, William H., .....               | University of Pennsylvania (1), .....   | 92.86     |
| Largeman, Harry Cornelius,               | Medico-Chirurgical College, Philadelphia (1), .....                             | 82.21     |
| Lau, Scott Welford, .....                | Jefferson Medical College (1), .....  | 88.00     |
| Laughlin, Harry, .....                   | University of Pennsylvania (1), .....   | 78.71     |
| Laughlin, Thomas Livezey, ..             | Hahnemann Medical College, Philadelphia (2), .....                              | 75.71     |
| .....                                    | Hahnemann Medical College, Philadelphia (2), .....                              | 70.28     |
| Leaman, Walter John, .....               | University of Pennsylvania (1), .....   | 55.93     |
| Leavitt, Frank Clyde, .....              | University of Pennsylvania (1), .....   | 81.79     |
| Ledbetter, Robert Emmet,...              | University of Pennsylvania (1), .....   | 85.43     |
| Lee, Alvin Craig, .....                  | Jefferson Medical College (1), .....  | 55.98     |



## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                   | Colleges.   | Averages. |
|--|---|-----------|
| Lee, Bernard R., .....                   | Jefferson Medical College (1), .....  | 75.29     |
| Leidich, Katherine Behm,...              | Woman's Medical College of the New York Infirmary<br>for Women and Children, New York, N. Y. (1), ..... | 82.57     |
| Leslie, Frank G., .....                  | Western University of Pennsylvania, Pittsburgh (1),...  | 75.86     |
| Lessig, James Alfred, .....              | University of Pennsylvania (1), .....   | 89.43     |
| Levering, Guy Percival,....              | University of Pennsylvania (1), .....   | 86.29     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....                                   | 49.64     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....                                   | 47.57     |
| Levis, George Edward, .....              | Hahnemann Medical College, Philadelphia (2), .....  | 82.28     |
| Lewis, Estell Budd, .....                | Jefferson Medical College (1), .....  | 82.43     |
| .....                                    | Cleveland Medical College, Cleveland, O. (2), .....   | 67.14     |
| Liggett, Joshua Willard,....             | University of Pennsylvania (1), .....   | 86.29     |
| Light, Israel Jacob K.,.....             | University of Pennsylvania (1), .....   | 80.71     |
| Light, Samuel Dawson W.,..               | University of Pennsylvania (1), .....   | 87.07     |
| Lilley, Wilbur Marchand,...              | University of Pennsylvania (1), .....   | 88.43     |
| Lindeman, Charles Edward,...             | University of Pennsylvania (1), .....   | 89.86     |
| Lindsey, John Hathaway,...               | University of Pennsylvania (1), .....   | 83.29     |
| Linn, Ralph Bridge, .....                | Medico-Chirurgical College, Philadelphia (1), .....   | 76.00     |
| Lippert, William Henry,....              | University of Pennsylvania (1), .....   | 78.64     |
| Livingood, Wm. Worman,...                | University of Pennsylvania (1), .....   | 89.86     |
| Lockett, William Robert,...              | Jefferson Medical College (1), .....  | 88.07     |
| Loeb, Alfred Augustus, ....              | McGill University, Montreal, Canada (1), .....  | 80.26     |
| Loeb, Victor Alexander,....              | University of Pennsylvania (1), .....   | 88.29     |
| Longdon, Mary, .....                     | Woman's Medical College of Pennsylvania (1),.....   | 83.00     |
| Longfellow, Jacob Winslow,...            | Jefferson Medical College (1), .....  | 77.00     |
| Luburg, Leon Franklin, ....              | University of Pennsylvania (1), .....   | 88.10     |
| Luther, John Weaver, .....               | University of Pennsylvania (1), .....   | 89.43     |
| .....                                    | University of Maryland School of Medicine, Baltimore<br>Md. (1), .....                                  | 59.36     |
| Mackenzie, Robert H. Mor-<br>rell, ..... | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....                                   | 80.43     |
| Macrum, Robert Shuter,....               | University of Pennsylvania (1), .....   | 82.21     |
| Malone, Clarence Mangen,...              | Medico-Chirurgical College, Philadelphia (1), .....   | 84.86     |
| Mantz, Eli Sylvester, .....              | Hahnemann Medical College, Philadelphia (2), .....  | 84.14     |
| Mark, Alexander, .....                   | Medico-Chirurgical College, Philadelphia (1), .....   | 84.86     |
| Marks, Morris, .....                     | Medico-Chirurgical College, Philadelphia (1), .....   | 81.42     |
| Marshall, Caroline S.,.....              | Woman's Medical College of Pennsylvania (1), .....  | 82.00     |
| Marshall, Joseph C., .....               | University of Pennsylvania (1), .....   | 85.71     |
| Martin, Frank Vall, .....                | Western University of Pennsylvania, Pittsburgh (1),..   | 78.79     |
| Martin, William Joline,....              | Hahnemann Medical College, Philadelphia (2), .....  | 88.86     |
| Marvel, Henry Vernon, ....               | Medico-Chirurgical College, Philadelphia (1), .....   | 77.71     |
| McBurney, Matthew Reed,...               | Hahnemann Medical College, Philadelphia (2), .....  | 89.28     |
| .....                                    | Medical Department, Vanderbilt University, Nashville,<br>Tenn. (1), .....                               | 69.36     |
| McCandless, Walter Cluley,.              | University and Bellevue Hospital Medical College, New<br>York (1), .....                                | 78.71     |
| McCarrell, David Leander...              | Western University of Pennsylvania, Pittsburgh (1),..   | 76.79     |
| McClure, Sorden, .....                   | University of Pennsylvania (1), .....   | 84.23     |
| McConnell, Paul George,...               | Western University of Pennsylvania, Pittsburgh (1),..   | 84.43     |
| McCready, Frank Lynn, ....               | University and Bellevue Hospital, Medical College,<br>New York (1), .....                               | 82.07     |
| McCune, Samuel Guyer,....                | Western University of Pennsylvania, Pittsburgh (1),..   | 77.00     |
| .....                                    | Baltimore University School of Medicine, Baltimore,<br>Md. (1), .....                                   | 63.86     |
| McDowell, Calvin Fenwick,.               | University of Michigan, Medical Department, Ann<br>Arbor (1), .....                                     | 87.86     |
| McGlinn, John A., .....                  | Medico-Chirurgical College, Philadelphia (1), .....   | 91.21     |
| McGowan, Joseph Augustine                | University of Pennsylvania (1), .....   | 85.86     |
| McKibbin, James Malcolm,.                | University of Pennsylvania (1), .....   | 83.36     |
| McKibbin, Mary Crouse,....               | University of Michigan, Medical Department, Ann<br>Arbor (1), .....                                     | 85.14     |
| (Withdrew), .....                        | University of Louisville, Ky. (1), .....  | 6.50      |
| McKinnon, Charles Lachlan,               | Western University of Pennsylvania, Pittsburgh (1),..   | 85.93     |
| McNish, George Thomas,....               | Western University of Pennsylvania, Pittsburgh (1),..   | 79.43     |
| McWilliams, Frank, .....                 | University of Pennsylvania (1), .....   | 82.07     |
| Meek, Eloise, .....                      | Woman's Medical College of Pennsylvania (1), .....  | 79.93     |
| Merryman, John Whitfield,.               | Jefferson Medical College (1), .....  | 84.14     |
| .....                                    | Howard University, Medical Department, Washington,<br>D. C. (1), .....                                  | 71.43     |
| Messinger, Victor S., .....              | Medico-Chirurgical College, Philadelphia (1), .....   | 86.57     |
| Mercer, Warren Charles,....              | Hahnemann Medical College, Philadelphia (2), .....  | 83.43     |
| Miller, Harold Applegate,...             | Western University of Pennsylvania, Pittsburgh (1),..   | 84.93     |
| Miller, Mary Thomas,.....                | Woman's Medical College of Pennsylvania (1), .....  | 81.43     |
| .....                                    | Baltimore Medical College, Baltimore, Md. (1), .....  | 57.86     |
| Miller, Thomas Alfred,....               | University of Pennsylvania (1), .....   | 81.00     |
| Miller, William Edward,....              | Medico-Chirurgical College, Philadelphia (1), .....   | 83.07     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),..   | 72.71     |
| Minoka, Lillie Rosa, .....               | Woman's Medical College of Pennsylvania (1), .....  | 79.93     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....   | 70.86     |
| Mintzer, George Seltzer,....             | Medico-Chirurgical College, Philadelphia (1), .....   | 76.00     |
| Mitchell, Lewis Thayer,....              | University of the South, Sewanee, Tenn. (3), .....  | 83.10     |
| Monaghan, William Francis,               | Medico-Chirurgical College, Philadelphia (1), .....   | 85.09     |
| Mongel, Ernest Bernhard,...              | University of Pennsylvania (1), .....   | 83.93     |
| Monie, Thomas, .....                     | Medico-Chirurgical College, Philadelphia (1), .....   | 89.07     |

## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                 | Colleges.   | Averages. |
|--|---|-----------|
| Montgomery, Beriah Alembert, .....     | University of Pennsylvania (1), .....                                     | 79.00     |
| Moore, Charles Leonard, ...            | Baltimore University School of Medicine, Baltimore, Md. (1), .....        | 75.00     |
| Moore, Edward Joseph, ....             | University of Pennsylvania (1), .....                                     | 86.07     |
| Moore, George Cooper, ....             | Jefferson Medical College (1), .....                                      | 85.09     |
| Moran, Thomas Wesley, ....             | Jefferson Medical College (1), .....                                      | 76.43     |
| Morrow, William Miller, ....           | Medico-Chirurgical College, Philadelphia (1), .....                       | 81.79     |
| Mosser, John Wesley, ....              | Medico-Chirurgical College, Philadelphia (1), .....                       | 86.36     |
| Muller, George Paul, .....             | University of Pennsylvania (1), .....                                     | 82.57     |
| Myers, Benjamin F., .....              | Baltimore Medical College, Baltimore, Md. (1), .....                      | 75.14     |
| Neely, Edgar C., .....                 | Medico-Chirurgical College, Philadelphia (1), .....                       | 83.07     |
| Neff, Charles C., .....                | University of Pennsylvania (1), .....                                     | 83.57     |
| .....                                  | Medico-Chirurgical College, Philadelphia (1), .....                       | 72.71     |
| Neff, Joseph, .....                    | Medico-Chirurgical College, Philadelphia (1), .....                       | 75.71     |
| Nefsky, Edith D., .....                | Woman's Medical College of Pennsylvania (1), .....                        | 75.14     |
| Nelson, Ernest Frank, ....             | Medico-Chirurgical College, Philadelphia (1), .....                       | 86.71     |
| Newlin, Arthur, .....                  | University of Pennsylvania (1), .....                                     | 80.14     |
| Newmayer, Solomon, .....               | University of Pennsylvania (1), .....                                     | 82.00     |
| Nicholls, James Calvin, ....           | Jefferson Medical College (1), .....                                      | 75.86     |
| Nicholls, R. Delmer, .....             | Jefferson Medical College (1), .....                                      | 79.57     |
| Nile, Sandy Brackett, .....            | Long Island College Hospital, Brooklyn, N. Y. (1), ....                   | 84.86     |
| Niles, Ralph Miner, .....              | Medico-Chirurgical College, Philadelphia (1), .....                       | 89.07     |
| Norris, George William, ....           | University of Pennsylvania (1), .....                                     | 86.86     |
| Norris, Robert Walter, .....           | Medico-Chirurgical College, Philadelphia (1), .....                       | 82.43     |
| O'Connor, Edward William, ..           | Medico-Chirurgical College, Philadelphia (1), .....                       | 84.43     |
| Odell, Thomas George, .....            | University of Pennsylvania (1), .....                                     | 84.43     |
| .....                                  | Cleveland Medical College, Cleveland, O. (2), .....                       | 66.00     |
| Oeffner, Peter John, .....             | Georgia College of Eclectic Medicine and Surgery, Atlanta, Ga. (3), ..... | 84.80     |
| Osborne, Caroline Amella, ...          | Woman's Medical College of Pennsylvania (1), .....                        | 87.86     |
| Ostrander, William Alonzo, ..          | Jefferson Medical College (1), .....                                      | 81.14     |
| Painter, Allen B., .....               | Medico-Chirurgical College, Philadelphia (1), .....                       | 90.21     |
| Park, William Edwin, .....             | University and Bellevue Hospital Medical College, New York (1), .....     | 81.43     |
| Parker, Frank Claveloux, ...           | University of Pennsylvania (1), .....                                     | 79.64     |
| Patterson, David Arthur, ...           | Rush Medical College, Chicago, Ill. (3), .....                            | 79.40     |
| Paul, Thomas Morrison, ....            | University of Pennsylvania (1), .....                                     | 83.09     |
| Peck, Welland A., .....                | Medico-Chirurgical College, Philadelphia (1), .....                       | 89.50     |
| Perry, Samuel Wesley, ....             | Jefferson Medical College (1), .....                                      | 83.21     |
| Phillips, Nathan Finley, ....          | Western University of Pennsylvania, Pittsburgh (1), ..                    | 76.86     |
| Phillips, Walter H., .....             | Hahnemann Medical College, Philadelphia (2), .....                        | 85.71     |
| Pittinger, Charles Rulon, ...          | University of Pennsylvania (1), .....                                     | 82.36     |
| Post, Frank Smith, .....               | Western University of Pennsylvania, Pittsburgh (1), ..                    | 86.21     |
| Poulson, William Courbet Thomas, ..... | Medico-Chirurgical College, Philadelphia (1), .....                       | 75.43     |
| Pratt, Frank L., .....                 | College of P. and S., Baltimore, Md. (1), .....                           | 75.50     |
| Price, Henry T., .....                 | University of Pennsylvania (1), .....                                     | 86.21     |
| Prideaux, William Albert, ...          | Medico-Chirurgical College, Philadelphia (1), .....                       | 87.50     |
| Proctor, William Marsh, ....           | Hahnemann Medical College, Philadelphia (2), .....                        | 90.14     |
| Randolph, Anna Moon, .....             | Woman's Medical College of Pennsylvania (1), .....                        | 81.57     |
| Rankin, Jr., George Thomas             | University of Pennsylvania (1), .....                                     | 88.43     |
| Rauch, Kimmell, .....                  | Eclectic Medical Institute, Cincinnati, O. (3), .....                     | 83.30     |
| Rawlings, Eve, .....                   | Woman's Medical College of Pennsylvania (1), .....                        | 79.14     |
| Raymond, Lewis H., .....               | Medico-Chirurgical College, Philadelphia (1), .....                       | 82.54     |
| Redington, Vida, .....                 | University of California, Los Angeles (1), .....                          | 82.93     |
| Reese, Lewis, .....                    | Jefferson Medical College (1), .....                                      | 81.86     |
| Reichard, Lewis Nyman, ....            | College of P. and S., Baltimore, Md. (1), .....                           | 80.64     |
| Ressler, John Lyte, .....              | University of Pennsylvania (1), .....                                     | 84.57     |
| Reynolds, Charles B., .....            | Medico-Chirurgical College, Philadelphia (1), .....                       | 84.36     |
| Ribetti, Giovanni Tommaso, ...         | Western University of Pennsylvania, Pittsburgh (1), ..                    | 85.43     |
| Richards, Charles Matthias, ...        | Hahnemann Medical College, Philadelphia (2), .....                        | 87.71     |
| Richards, Florence Harvey, ...         | Woman's Medical College of Pennsylvania (1), .....                        | 89.21     |
| Ridgeway, George Malven, ...           | University of Pennsylvania (1), .....                                     | 89.36     |
| Ridpath, Robert Ferguson, ...          | Medico-Chirurgical College, Philadelphia (1), .....                       | 82.79     |
| Risley, John Norman, .....             | University of Pennsylvania (1), .....                                     | 75.93     |
| Ritchie, Marion Delmar, ....           | University of Pennsylvania (1), .....                                     | 90.71     |
| Roberts, James Eugene, ....            | University of Pennsylvania (1), .....                                     | 87.86     |
| Robison, John Isaac, .....             | Jefferson Medical College (1), .....                                      | 83.57     |
| Roebuck, John Paul, .....              | Medico-Chirurgical College, Philadelphia (1), .....                       | 82.50     |
| Romero, Nicholas, .....                | University of Pennsylvania (1), .....                                     | 82.21     |
| Rondinella, Annina Carmela             | Woman's Medical College of Pennsylvania (1), .....                        | 78.59     |
| Royer, Benjamin Franklin, ..           | Jefferson Medical College (1), .....                                      | 86.43     |
| Rubenstein, Louis G., .....            | Western University of Pennsylvania, Pittsburgh (1), ..                    | 84.00     |
| .....                                  | Medico-Chirurgical College, Philadelphia (1), .....                       | 65.79     |
| Russell, Relster Kephart, ...          | Hahnemann Medical College, Philadelphia (2), .....                        | 88.14     |
| .....                                  | Hahnemann Medical College, Philadelphia (2), .....                        | 66.43     |
| Saeger, Luther Jacob, .....            | University of Pennsylvania (1), .....                                     | 75.14     |
| Saling, John P., .....                 | Western University of Pennsylvania, Pittsburgh (1), ..                    | 83.43     |
| Sangston, David Hibbs, ....            | Western University of Pennsylvania, Pittsburgh (1), ..                    | 82.43     |
| Scanlan, William J., .....             | Medico-Chirurgical College, Philadelphia (1), .....                       | 83.29     |
| Schabinger, Charles, .....             | Medico-Chirurgical College, Philadelphia (1), .....                       | 81.00     |
| Schamberg, Morris Isaac, ...           | Medico-Chirurgical College, Philadelphia (1), .....                       | 79.71     |
| Schroeder, Henry Franklin, ..          | Medico-Chirurgical College, Philadelphia (1), .....                       | 83.86     |
| Schuyler, Annie Delight                | .....   | .....     |
| Jackaon, .....                         | Woman's Medical College, Chicago, Ill. (1), .....                         | 78.20     |

## LIST OF PERSONS EXAMINED.—Continued.

| Names.                                   | Colleges.  | Averages. |
|--|--|-----------|
| Schwartz, George Jacob,....              | Medico-Chirurgical College, Philadelphia (1), .....                          | 81.79     |
| Seabourne, Frank J., .....               | Medico-Chirurgical College, Philadelphia (1), .....                          | 86.50     |
| Seaman, Stephen W., .....                | Medico-Chirurgical College, Philadelphia (1), .....                          | 88.43     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                       | 66.79     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                       | 69.29     |
| .....                                    | Baltimore Medical College, Baltimore, Md. (1), .....                         | 68.98     |
| .....                                    | Baltimore Medical College, Baltimore, Md. (1), .....                         | 61.83     |
| Shannon, John Richard,....               | University of Pennsylvania (1), .....  | 75.21     |
| .....                                    | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 57.79     |
| Shaw, Abraham, .....                     | Queen's Medical College, Kingston, Canada (1),.....                          | 82.14     |
| Shaw, Farnham Horatio,....               | University of Pennsylvania (1), .....  | 85.14     |
| Shelmerdine, Jr., Edward Kirkland, ..... | University of Pennsylvania (1), .....  | 82.94     |
| Shenkin, Julius, .....                   | Medico-Chirurgical College, Philadelphia (1), .....                          | 78.57     |
| Sherrer, Harry Straub,....               | University of Pennsylvania (1), .....  | 86.29     |
| Shifferstine, Edgar Ephraim, .....       | University of Pennsylvania (1), .....  | 86.64     |
| Shiffert, Herbert Orlando,...            | Medico-Chirurgical College, Philadelphia (1), .....                          | 90.86     |
| Shook, Jay Ralph, .....                  | University of Maryland School of Medicine, Baltimore Md. (1), .....          | 85.00     |
| .....                                    | Hahnemann Medical College, Philadelphia (2), .....                           | 62.57     |
| Shute, Furman Robbins, ....              | Hahnemann Medical College, Philadelphia (2), .....                           | 78.28     |
| Sichel, C. Clarence, .....               | University of Pennsylvania (1), .....  | 85.29     |
| .....                                    | Barnes Medical College, St. Louis, Mo. (1), .....                            | 70.14     |
| Slaughter, Frank Voshell,...             | Hahnemann Medical College, Philadelphia (2), .....                           | 75.86     |
| Sleppy, Roy Ezra, .....                  | Western University of Pennsylvania, Pittsburgh (1),...                       | 83.57     |
| Sloan, Malachi Wilson, ....              | Hahnemann Medical College, Philadelphia (2), .....                           | 80.86     |
| Sloan, Nannie May, .....                 | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                      | 87.70     |
| Slonimsky, George, .....                 | Medico-Chirurgical College, Philadelphia (1), .....                          | 75.07     |
| .....                                    | Southern Homoeopathic Medical College, Baltimore, Md. (2), .....             | 46.00     |
| .....                                    | Southern Homoeopathic Medical College, Baltimore, Md. (2), .....             | 63.28     |
| Smith, Edmund Landus,....                | University of Pennsylvania (1), .....  | 87.79     |
| .....                                    | Medico-Chirurgical College, Philadelphia (1), .....                          | 67.71     |
| Smith, Henry Albert, .....               | Medico-Chirurgical College, Philadelphia (1), .....                          | 75.43     |
| Smith, John Fogg, .....                  | University of Pennsylvania (1), .....  | 75.00     |
| Smith, Rodney Saeger, .....              | University of Pennsylvania (1), .....  | 86.86     |
| Snyder, George Guy, .....                | Medico-Chirurgical College, Philadelphia (1), .....                          | 77.43     |
| Southwick, Edward M.,....                | Baltimore Medical College, Baltimore, Md. (1), .....                         | 79.71     |
| Spitzer, William Maxwell,...             | University of the City of New York, Medical Department, New York (1), .....  | 86.86     |
| Stambaugh, Charles J.,....               | Medico-Chirurgical College, Philadelphia (1), .....                          | 84.21     |
| Stanton, John Patrick, ....              | University and Bellevue Hospital Medical College, New York, N. Y. (1), ..... | 90.21     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                       | 86.86     |
| Staub, Franklin Benjamin,...             | University of Pennsylvania (1), .....  | 86.00     |
| Steel, William Albert, .....             | College of P. and S., Baltimore, Md. (1), .....                              | 85.14     |
| Steeves, Edward Willis, ....             | Medico-Chirurgical College, Philadelphia (1), .....                          | 77.28     |
| Steiner, Samuel, .....                   | University of Pennsylvania (1), .....  | 85.21     |
| Stewart, Charles Rowland,...             | Jefferson Medical College (1), .....   | 84.29     |
| Stock, George Andrew,....                | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 41.50     |
| .....                                    | Western University of Pennsylvania, Pittsburgh (1),...                       | 80.43     |
| Storer, Frank Morgan,....                | Howard University, Medical Department, Washington, D. C. (1), .....          | 69.00     |
| .....                                    | Howard University, Medical Department, Washington, D. C. (1), .....          | 75.00     |
| Strickland, George Generious, .....      | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 59.71     |
| .....                                    | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 69.43     |
| Strohecker, Samuel Martin,...            | College of P. and S., Chicago Ill. (1), .....                                | 84.43     |
| Sturge, Edgar, .....                     | University and Bellevue Hospital Medical College, New York, N. Y. (1), ..... | 88.14     |
| .....                                    | University of Pennsylvania (1), .....  | 87.71     |
| Sullivan, John Joseph, .....             | Jefferson Medical College (1), .....   | 84.79     |
| Squires, Walter Howland,...              | Gross Medical College, Denver, Col. (1), .....                               | 67.73     |
| .....                                    | Hahnemann Medical College, Philadelphia (2), .....                           | 79.28     |
| Taylor, Howard Warden,....               | Western University of Pennsylvania, Pittsburgh (1),...                       | 76.43     |
| Taylor, Oswald Gretton,....              | University of Pennsylvania (1), .....  | 77.64     |
| Taylor, Robert Fletcher,....             | University of Pennsylvania (1), .....  | 84.29     |
| Templeton, Harry Gorham,...              | University of Pennsylvania (1), .....  | 76.43     |
| Thatcher, Paxson Blakey,...              | University of Pennsylvania (1), .....  | 81.57     |
| Thome, William McKee,....                | Jefferson Medical College (1), .....   | 78.43     |
| Tindall, Percy Andrew,....               | Hahnemann Medical College, Philadelphia (2), .....                           | 81.14     |
| Tipton, Karl Flemming,....               | Medico-Chirurgical College, Philadelphia (1), .....                          | 56.64     |
| .....                                    | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 87.14     |
| Tomkins, Erle Duncan, ....               | University of Pennsylvania (1), .....  | 86.07     |
| Torey, Wilberforce W.,....               | University and Bellevue Hospital Medical College, New York, N. Y. (1), ..... | 90.50     |
| .....                                    | University of Pennsylvania (1), .....  | 78.00     |
| Troutman, George Christian,...           | Cleveland Medical College, Cleveland, Ohio (2), .....                        | 80.29     |
| Turner, Jennie Paul, .....               | Woman's Medical College of Pennsylvania (1), .....                           |           |
| Ulrich, Katherine W., .....              |  |           |



## LIST OF PERSONS EXAMINED.—Continued.

| Names.                             | Colleges.  | Averages. |
|------------------------------------|--|-----------|
| Updegraff, Harry Covode,...        | University of Pennsylvania (1), .....  | 82.57     |
| Van Kirk, Herbert Spencer,...      | University of Pennsylvania (1), .....  | 84.29     |
| Vastine, Jacob Marion, . . .       | Medico-Chirurgical College, Philadelphia (1), .....                          | 88.21     |
| Vaux, Carey Judson, . . . . .      | Western University of Pennsylvania, Pittsburgh (1), ..                       | 86.71     |
| Wadhams, Raymond Lynde, . . .      | College of P. and S., New York, N. Y. (1), .....                             | 91.79     |
| Walde, Arthur, .....               | Physio-Medico College, Indianapolis, Indiana (3), .....                      | 81.10     |
| Waller, Edwin Forest, .....        | Western University of Pennsylvania, Pittsburgh (1), ..                       | 82.09     |
| Walsh, Arthur F., . . . . .        | Western University of Pennsylvania, Pittsburgh (1), ..                       | 82.14     |
| Walters, George Warren, .....      | Western University of Pennsylvania, Pittsburgh (1), ..                       | 84.57     |
| Wanamaker, John, 3rd. ....         | University of Pennsylvania (1), .....  | 88.35     |
| Warner, Albert Rowland, .....      | University of Pennsylvania (1), .....  | 83.71     |
| .....                              | Cleveland Medical College, Cleveland, Ohio (2), .....                        | 72.00     |
| Warner, Samuel, . . . . .          | Cleveland Medical College, Cleveland, Ohio (2), .....                        | 88.14     |
| .....                              | Medico-Chirurgical College, Philadelphia (1), .....                          | 68.07     |
| Weber, Harry Friedman, .....       | Jefferson Medical College (1), .....   | 81.36     |
| Weibel, Elmer Grant, .....         | University and Bellevue Hospital Medical College, New York, N. Y. (1), ..... | 85.71     |
| .....                              | .....  | 85.64     |
| Welmer, Clay Holloway, .....       | University of Pennsylvania (1), .....  | 80.79     |
| Welden, Carl Farrand, .....        | Medico-Chirurgical College, Philadelphia (1), .....                          | .....     |
| Wertman, Austin Granville, .....   | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 82.64     |
| .....                              | .....  | 79.36     |
| West, George Silas, .....          | University of Pennsylvania (1), .....  | 89.85     |
| Wheaton, Aydelotte W., .....       | University of Pennsylvania (1), .....  | 85.00     |
| White, Aileen Duffell, .....       | Woman's Medical College of Pennsylvania (1), .....                           | 68.64     |
| .....                              | University of Pennsylvania (1), .....  | 75.07     |
| White, Abraham E., .....           | University of Pennsylvania (1), .....  | 79.43     |
| White, Edward H., .....            | Baltimore Medical College, Baltimore, Md. (1), .....                         | 82.43     |
| Whiteway, Harold Morse, .....      | University of Pennsylvania (1), .....  | 88.28     |
| Wiesenberg, Theodore H., .....     | University of Pennsylvania (1), .....  | 81.57     |
| Wilkinson, Richard Powers, .....   | Medico-Chirurgical College, Philadelphia (1), .....                          | 86.64     |
| Wilkinson, Truman George, .....    | Medico-Chirurgical College, Philadelphia (1), .....                          | 85.43     |
| Williams, Carl Sheldon, .....      | University of Pennsylvania (1), .....  | 90.00     |
| Williams, Horace Oscar, .....      | Hahnemann Medical College, Philadelphia (2), .....                           | 71.29     |
| .....                              | Medico-Chirurgical College, Philadelphia (1), .....                          | 76.00     |
| Wimentitz, Ralph, .....            | Medico-Chirurgical College, Philadelphia (1), .....                          | 77.79     |
| Winebrake, Albert Jefferson, ..... | Jefferson Medical College (1), .....   | .....     |
| Winters, George Ross, .....        | University and Bellevue Hospital Medical College, New York, N. Y. (1), ..... | 82.71     |
| .....                              | .....  | 82.36     |
| Wintersteen, Thos. Beaver, .....   | University of Pennsylvania (1), .....  | 85.79     |
| Woerner, Lydia, .....              | Woman's Medical College of Pennsylvania (1), .....                           | 85.94     |
| Wolf, Wilbert Joseph, .....        | University of Pennsylvania (1), .....  | .....     |
| Wolfe, Mary Moore, .....           | University of Michigan, Medical Department, Ann Arbor (1), .....             | 85.86     |
| .....                              | .....  | 69.50     |
| Wolfson, Louis, .....              | Medico-Chirurgical College, Philadelphia (1), .....                          | 75.14     |
| Wood, Ben. Black, .....            | Medico-Chirurgical College, Philadelphia (1), .....                          | 80.26     |
| Woodburn, Chas. McKeehan, .....    | Western University of Pennsylvania, Pittsburgh (1), ..                       | 84.43     |
| Woodcock, Lee Barnes, .....        | University of Pennsylvania (1), .....  | 85.79     |
| Woodruff, Robert Hamilton, .....   | Medico-Chirurgical College, Philadelphia (1), .....                          | 96.00     |
| Woodruff, Row Obed, .....          | Hahnemann Medical College, Philadelphia (2), .....                           | .....     |
| .....                              | University of Vermont, Medical Department, Burlington, Vt. (1), .....        | 83.57     |
| Woods, Harvey Wharton, .....       | University of Vermont, Medical Department, Burlington, Vt. (1), .....        | 83.64     |
| .....                              | Baltimore University School of Medicine, Baltimore, Md. (1), .....           | 15.43     |
| (Expelled), .....                  | University of Pennsylvania (1), .....  | 77.43     |
| Yale, Arthur Wells, .....          | Hahnemann Medical College, Philadelphia (2), .....                           | 82.09     |
| Yeager, George Carpenter, .....    | Jefferson Medical College (1), .....   | 84.86     |
| Yelding, Bradley Wakeman, .....    | Medico-Chirurgical College, Philadelphia (1), .....                          | 83.79     |
| Young, Frank Raymond, .....        | University of Pennsylvania (1), .....  | 75.43     |
| Yoder, Allen A., .....             | Medico-Chirurgical College, Philadelphia (1), .....                          | 89.80     |
| Yoder, Allen L., .....             | Eclectic Medical Institute, Cincinnati, Ohio (3), .....                      | 91.71     |
| Zelgler, Samuel Mason, .....       | University of Pennsylvania (1), .....  | 80.64     |
| Zerner, Hiram Elmore, .....        | Western University of Pennsylvania, Pittsburgh (1), ..                       | 77.50     |
| Zimlick, Arthur John, .....        | St. Louis Medical College, St. Louis, Mo. (1), .....                         | .....     |

**LIST OF LICENSES ISSUED TO PERSONS HOLDING CERTIFICATES FROM OTHER STATES.**

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73. Walter Gray Elmer, March 11, 1899 (Allopathic). New Jersey license No. 841.

74. Franklin Machette, April 7, 1899 (Allopathic). New Jersey license No. 898.

75. Paul Nathan Litchfield, May 5, 1899 (Allopathic). New Jersey license No. 456.

76. Ernest Shurley Ramsdell, May 13, 1899 (Allopathic). New Jersey license No. 666.

77. Nathaniel S. Greenwood, June 17, 1899 (Allopathic). New Jersey license No. 890.

78. Albert Ralston Matheny, June 18, 1899 (Allopathic). New Jersey license No. 807.

79. Charles Clifton Royce, July 20, 1899 (Allopathic). New Jersey license No. 1009.

80. Ruth Tustin, July 21, 1899 (Allopathic). New Jersey license No. 986.

81. Don Marial Myers, July 24, 1899 (Homoeopathic). New Jersey license No. 950.

82. Paul Traub, July 27, 1899 (Allopathic). New Jersey license No. 977.

83. Asher Stephen Bender, July 27, 1899 (Allopathic). New Jersey license No. 997.

84. George MacIntire Ferguson, July 27, 1899 (Allopathic). New Jersey license No. 952.

85. John E. L. Van Sciver, August 1, 1899 (Allopathic). New Jersey license No. 976.

86. Abraham Wolf Sullivan, August 12, 1899 (Allopathic). New Jersey license No. 263.

87. Amos Keeler Du Bell, Jr., August 21, 1899 (Allopathic). New Jersey license No. 978.

88. Charles Higginson Cloud, September 12, 1899 (Homoeopathic). New Jersey license No. 980.

89. Frederick Howard Decker, September 27, 1899 (Allopathic). New Jersey license No. 687.

90. Charles Tomlinson Haines, October 30, 1899 (Homoeopathic). New Jersey license No. 802.

91. Harvey Weaver Sterner, October 30, 1899 (Allopathic). New Jersey license No. 1052.

92. Joseph Herbert Ackerman, October 30, 1899 (Homoeopathic). New Jersey license No. 1002.

93. Jacob Metz Davis, November 8, 1899 (Homoeopathic). New Jersey license No. 999.

94. Andrew Albert Weaver, November 8, 1899 (Allopathic). New Jersey license No. 1013.

95. Robert D. E. Follweiler, November 21, 1899 (Allopathic). New Jersey license No. 1059.

96. John Lawrence Plunkett, November 27, 1899 (Allopathic). New Jersey license No. 415.

97. Joseph Hubbard Oram, December 8, 1899 (Allopathic). New Jersey license No. 958.

98. Walter C. Cheesman, December 8, 1899 (Homoeopathic). New Jersey license No. 998.

99. Warren Hastings Smith, December 29, 1899 (Homoeopathic). New Jersey license No. 1001.

100. Thomas Stotesbury Githens, January 8, 1900 (Allopathic). New Jersey license No. 1053.

101. Evan Worthington Michener, January 13, 1900 (Allopathic). New Jersey license No. 1000.

102. Joseph G. Kramer, January 29, 1900 (Allopathic). New Jersey license No. 1062.

**QUESTIONS USED IN THE EXAMINATION BY THE MEDICAL  
EXAMINING BOARDS.\***

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June, 1899.

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**Anatomy.**

1. Name the different kinds of articulation, and give an example of each.
2. Describe the shoulder joint, and name the bones and ligaments entering into its formation.
3. Name the ligaments of the lower jaw.
4. From what arteries do the mammary glands receive their blood supply?
5. State the relation of the intercostal blood vessels to contiguous bones.
6. State the relations and give a general description of the parotid gland.
7. Describe the endosteum and the periosteum.
8. By what principal venous trunks is the blood brought back to the heart from distant parts of the body?
9. Outline the position of a normal heart and name the point at which the apex beat will be found.
10. Give a short general description of the skin, its origin, and period of development.

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December, 1899. .

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**Anatomy.**

1. Give the relations of the femoral artery, at its origin, and name the branches given off, as it descends the leg.
2. Give five principal points to which the pneumogastric nerve is distributed.

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\*Questions in Anatomy, Physiology and Pathology, Diagnosis and Hygiene, Surgery, Obstetrics and Chemistry, are the same for the three Boards.

3. Describe the mammary gland.
4. What nerve supplies motion to the muscles of mastication, and from what point of the skull does it emerge?
5. Name the elements composing, and describe the hip-joint.
6. With what bones does the temporal articulate?
7. Give the origin of the brachial plexus of nerves, and the distribution of its principal branches.
8. Describe the uterus, giving normal size, form and relations.
9. Locate and describe the fissure of Rolando.
10. Name the great veins which have no valves.

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June, 1899.

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#### Physiology.

1. Describe the special function possessed by each nerve factor concerned in a vaso-motor action, and state how either affects arterial tension.
2. State with what principal functions pulmonary endothelium is endowed, and describe the origin and character of the blood which an alveolus utilizes during its physiological action.
3. Give the source and state the character of the blood, supplying hepatic parenchymatous cells, and describe the two principal functions they possess.
4. Describe the general functions possessed by renal endothelium of both the glomerules and convoluted tubules.
5. Describe the clotting of blood and give a theory for the genesis of fibrin.

#### Pathology.

1. Describe the physical alterations characterizing the lesions of the cardiac valve leaflets and the effects of these upon the sounds of the heart.
2. Name several morbid conditions giving higher or lower than normal temperature, and explain how such change is effected.
3. Describe the macroscopic and microscopic characteristics of diphtheritic membrane.
4. Describe thrombosis and embolism of a cerebral vessel, with the changes induced in surrounding brain tissue.
5. In any form of obstruction of the biliary duct, explain through what component elements of the liver and by what blood channels, bile enters the economy and occasions icterus.

December, 1899.

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### Physiology.

1. Describe the principal phenomena that occur when muscle is physiologically active.
2. State, in brief, the functions of connective tissue, naming three varieties of this tissue.
3. Give the present view entertained as to the physiology of the cuneus.
4. Explain how absorption occurs by the lymphatics and state what factors are operative in the process.
5. Where and how do the various types of food, when digested, enter the blood?

### Pathology.

1. Define sapræmia, septicæmia and pyæmia, and state what constitutes the specific characteristics of each.
2. Describe in detail, the changes that occur in an artery, the seat of endarteritis obliterans.
3. Give the nature and location of the morbid deposits that occur in articular rheumatism.
4. Give the pathological conditions characterizing the second stage of acute croupous pneumonia.
5. Describe the pathological changes and evacuated substances of ulcerative colitis.

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June, 1899.

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### Diagnosis.

1. Diagnosticate infantile spinal paralysis.
2. Differentiate follicular tonsillitis from diphtheria.
3. Name the distinctive symptoms of typhoid fever.
4. Differentiate acute cerebral meningitis from syphilitic gumma.
5. Differentiate angina pectoris from intercostal neuralgia.

### Hygiene.

1. By what process may disease germs be removed from contaminated water?
  2. How many cubic feet of fresh air per hour are required by an adult?
  3. Name five common communicable diseases of school children.
  4. What parasites, dangerous to man, are found in the flesh of animals; state in what animals they are found?
  5. Describe the proper hygienic measures for the infant during first three months of life.
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December, 1899.

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### Diagnosis.

1. Describe three pathologic cardiac murmurs, and give their diagnostic signification.
2. Enumerate the diagnostic symptoms of the three stages of syphilis.
3. Differentiate erysipelas and erythema.
4. Differentiate progressive muscular atrophy from acute myelitis.
5. Diagnosticate croupous pneumonia.

### Hygiene.

1. What is understood by the term "hard water," and how can the condition be corrected?
2. What vegetable products used as foods contain the largest proportion of carbo-hydrates, and which the largest proportion of proteids?
3. How do disinfectants and germicides prevent the spread of disease germs?
4. Name five diseases requiring quarantine regulation, and state the time necessary for each.
5. Mention some of the advantages of carefully prepared artificial ice as compared with natural ice.



June, 1899.

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**Surgery.**

1. Give the symptoms and treatment of acute synovitis of the knee joint.
  2. Describe the symptoms and treatment of acute periostitis.
  3. Enumerate the recognized degrees of burns, and give the treatment for the second degree.
  4. Give the symptoms and treatment of fracture of the upper third of the femur.
  5. Give three important diagnostic symptoms indicating vesical calculus in children, and detail the most approved operation for extraction.
  6. Enumerate the symptoms of any condition in which trephining of the skull is necessary.
  7. Under what conditions is it advisable to wait for development of a line of demarcation in gangrene, before amputating.
  8. Differentiate complete inguinal hernia, varicocele and hydrocele.
  9. Detail the operation for ligation of the primitive carotid artery, below the omo-hyoid muscle.
  10. Describe any of the several dislocations of the elbow joint, giving the mode of reduction and treatment.
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December, 1899.

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**Surgery.**

1. Describe the best non-operative methods of reducing incarcerated inguinal hernia.
2. Give the symptoms and treatment of subluxations of the inferior maxilla.
3. State the site and symptoms of Colles' fracture, and describe the most approved treatment.
4. Differentiate chancre and chancroid and give the treatment for each.
5. Describe the most approved operation for unilateral hare-lip and state the age at which it is preferable to operate.

6. Describe an anterior luxation of the shoulder joint, and give methods of reduction.
7. Detail the symptoms and describe the surgical management of a case of psoas abscess.
8. Give the treatment and complications in repair of frozen tissues.
9. Define the causes and state the symptoms and treatment of sinus and fistula.
10. Describe the treatment of penetrating gun-shot wound of the skull.

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June, 1899.

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Obstetrics.

1. Enumerate the symptoms of one form of ectopic pregnancy?
2. How would you treat a normal case of labor aseptically?
3. How would death of the foetus in utero be recognized after period of viability? How would you manage such a case?
4. Give the causes, import and management of anti-partum hemorrhage.
5. Give treatment for retained placenta after abortion.
6. What anatomical features of the pelvis are of special importance in the process of labor?
7. Give four positions in head presentations, the order of their frequency and the mechanism of the most common.
8. Give causes, dangers, and management of prolapse of the funis.
9. From what condition does puerperal eclampsia proceed, and how would you recognize and manage a case?
10. Mention the most frequent causes of puerperal mammary inflammation, and give prophylaxis and treatment.

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December, 1899.

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Obstetrics.

1. Diagnose a knee presentation and describe a method of delivery.
2. Describe the method of applying forceps at the superior strait, and state how traction should be performed.

3. What are the maternal causes of dystocia and the methods of relief.

4. Describe the delivery of the after coming head, when it is flexed.

5. What injuries may happen to the bladder and rectum during labor, and how may they be avoided?

6. State with what growths and diseases of the abdominal cavity, pregnancy may be confounded, and give the points of differentiation.

7. Give the diagnosis and treatment of a case of asphyxia neonatorum.

8. Under what conditions is the induction of premature labor justifiable, and how should it be performed?

9. Define placenta prævia; name three varieties and give the treatment for one.

10. Describe the method of procedure, when accomplishing delivery, of the foetus presenting transversely.

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June, 1899.

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Chemistry.

1. Write out the chemical formula to represent the reaction that takes place on boiling Fehling's solution with diabetic urine.

2. What new compounds are formed when corrosive sublimate and iodide of potassium are combined in solution? Write out the formula for the reaction.

3. What are the chlorides of the urine? How are they chemically recognized in urinalysis?

4. How should water be distilled, and at what temperature is its specific gravity standard?

5. What is carbolic acid? State its antidotes.

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December, 1899.

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Chemistry.

1. Describe the chemical characteristics of carbonic acid gas, and give its formula.

2. Write the chemical formula to represent the reaction which takes place when calomel and lime water are combined.

3. Name the earthy and alkaline phosphates present in urine, and state under what reaction they are precipitated and how chemically differentiated.

4. Describe briefly two methods of quantitative estimation of glucose in urine.

5. Describe a method for the quantitative estimation of urea and albumen in urine.

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### STATE MEDICAL SOCIETY.

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June, 1899.

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#### Materia Medica.

1. Give the symptoms and treatment of a case of cannabis indica poisoning.

2. Write a prescription for a diarrhoea mixture containing at least three drugs. Use no abbreviations.

3. Describe the physical properties of Tr. ferri chloridi, acidum salicylicum and liquor plumbi subacetatis.

4. Give the doses of atropinæ sulphas, hyoscinæ hydrobromas, Ext. conii fld. and acidum carbolicum.

5. Give the habitats of ipecacuanha, coca erythroxylon, cascara sagrada and strophanthus.

#### Therapeutics.

1. Mention two drugs used to allay the cough of phthisis pulmonalis, and state how they accomplish it.

2. Name three remedies used in the treatment of typhoid fever, and give the reason for their administration.

3. Differentiate the physiological action of chloral hydrate from opium.

4. How do nux vomica and belladonna, when given with a purgative, assist in its action?

5. State the conditions of the circulatory system indicating the use of nitroglycerine and digitalis.

### Practice.

1. Name five diseases in which Cheyne-Stokes respiration is commonly found.
  2. Give the symptoms and sequelæ of epidemic cerebro-spinal meningitis (cerebro-spinal fever).
  3. Locate the lesions in the following given cases; Right-sided hemiplegia without loss of consciousness, with aphasia; and the same condition, with impaired sensation.
  4. Name five lesions of the lungs that cause an increase of the rate of respiration.
  5. Give the symptoms and treatment of dilatation of the stomach.
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December, 1899.

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### Materia Medica.

1. Write a complete prescription for a cathartic pill, not official, containing at least three active ingredients. Use no abbreviations.
2. Define a mixture, a sinapism, a lotion, and a liniment.
3. Give the maximum dose, for an adult, of each of the following: cocaine hydrochlorate, strychnia sulphas, tincture of gelsemium, san-tonin and fluid extract of belladonna.
4. Give the dose for a child two weeks old, of each of the following: Tr. opii camphorata, strychnia sulphas, atropinæ sulphas, and calomel.
5. Describe subgallate of bismuth, salicylate of sodium, bromide of sodium, tannic acid and dried sulphate of iron.

### Therapeutics.

1. For a case of feeble heart with high arterial tension, which is preferable, digitalis or strophanthus, and why?
2. What mineral and vegetable drugs could be combined for the treatment of hyperacidity of the stomach due to excessive secretion of hydrochloric acid?
3. Name the best cardiac and respiratory stimulant in collapse occurring during acute disease, and state what drug could be advantageously combined with it, in such cases.

4. Which of the drugs, belonging to that group of which belladonna is a type, exercises the most sedative influence upon the nervous system?

5. Name three remedies for the treatment of the first stage of croupous pneumonia, and explain their action.

#### Practice.

1. State the significance of epithelial, fatty and hyaline renal casts.
2. What are the diagnostic symptoms of scarlatina?
3. Name three intracranial lesions having papillitis (choked disk) as a result.
4. Give the symptoms of diabetes mellitus, and specify two symptoms that are pathognomonic of diabetic coma.
5. Describe the murmur and pulse in aortic regurgitation.

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### HOMŒOPATHIC MEDICAL SOCIETY.

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June, 1899.

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#### Materia Medica.

1. What is camphor? How is it prepared for homœopathic use? Give four symptoms characteristic of this drug.
2. Compare and contrast arsenicum and ferrum metallicum.
3. Give the characteristic tongue symptoms of antimonium crudum, bryonia, mercurius solubilis, rhus toxicodendron.
4. What is glonoine? Give four symptoms characteristic of this drug.
5. Describe the constipation of alumina, magnesia muriatica, nuxvomica, opium.

#### Therapeutics.

1. Differentiate the therapeutic indications for the use of pulsatilla and kali bichromicum in acute bronchial catarrh.
2. Differentiate the therapeutic indications for the use of hamamelis, china and ipecacuanha in pulmonary hemorrhage.

3. Compare the indications for podophyllum and croton tiglium in entero-colitis.

4. Differentiate aconite, chamomilla, and rhus toxicodendron in rheumatic fever.

5. Give not less than three characteristic indication each, for calcaria, carbinica, hepar sulphuris calcis, and graphites, in the treatment of suppurative processes.

### Practice.

1. Describe fully the general management of a case of scarlet fever.

2. Define pulmonary œdema; state how it may be caused, and mention three remedies useful in its treatment.

3. What special precautions are necessary in a case of chronic interstitial nephritis accompanied with dilation of the heart?

4. Give clearly general directions for the care of a case of small-pox, and mention three remedies useful in its treatment.

5. Define tubercular cerebral meningitis; four prominent symptoms, and three important remedies.

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December, 1899.

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### Materia Medica.

1. What is anacardium? State its characteristic mental, and gastro-enteric symptoms.

2. Give characteristic cough, expectoration and chest symptoms of causticum and kali carbonicum.

3. Give symptoms peculiar to women, characteristic of cimicifuga and caulophyllum.

4. What is mercurius corrosivus? Give three or four of its distinctively characteristic symptoms.

5. Give the throat symptoms of mercurius cyanatus; and, the gastro-enteric symptoms of rheum.

### Therapeutics.

1. Name three remedies useful in acute catarrhal enteritis, and give not less than three characteristic symptoms for each.

2. Give three characteristic indications for the use of actæa racemosa (cimicifuga), in diseases involving the female sexual system.



3. Name three remedies important in the treatment of diphtheria, and give not less than three characteristic indications for each.
4. Name two remedies useful in the treatment of acute nephritis, and give not less than three characteristic symptoms for each.
5. What therapeutic indications would lead you to employ hepar in acute tonsillitis, and how would you differentiate from mercurius vivus?

### Practice.

1. How would you diagnose mitral insufficiency, and what hygienic care would you enjoin in the treatment of such a case?
2. What do you understand by the term "hectic fever?" Describe its characteristic features.
3. Define asthma, and name three remedies homœopathically indicated in its treatment.
4. Give the symptoms, physical signs and general treatment of acute bronchitis.
5. Define erysipelas. Outline the general treatment of a case.

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## ECLECTIC MEDICAL SOCIETY.

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June, 1899.

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### Materia Medica.

1. What are the medicinal properties and uses of sodium phosphate?
2. What are the indications for the use of chionanthus?
3. What are the medicinal properties and uses of eupatorium perfoliatum?
4. What are the medicinal properties and uses of cuprum?
5. What is salol, its medical uses and doses?

### Therapeutics.

1. What is your opinion concerning the therapeutic action of water?
2. What are the indications for and uses of asclepias tuberosa?

3. What are the indications for *echafolta*?
4. What are the properties and uses of *veratrum viride*, and when is its use contra-indicated?
5. What is meant by a tonic, sedative, and sudorific, and give example of each?

### Practice.

1. Name the diseases common to the stomach and give treatment for acute gastritis.
2. Enumerate the diseases common to the throat, and give treatment for tonsillitis.
3. Give symptoms of appendicitis and treatment without an operation.
4. Give the symptoms and treatment of a case of cerebro-spinal meningitis.
5. Give three causes of convulsions in children, and treatment.

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December, 1899.

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### Materia Medica.

1. Name some of the special indications for the use of *passiflora*.
2. What are the medicinal properties and uses of acetate of sodium?
3. What is carbonate of sodium; name some of its therapeutical properties and uses?
4. What are the indications for the medicinal uses of salicylic acid?
5. What are some of the leading indications for the use of *gelsemium*?

### Therapeutics.

1. Describe the therapeutic uses of zinc oxide and sulphate of zinc.
2. What is the therapeutic use of *buchu*?
3. Mention two remedies commonly used to increase intestinal peristalsis.
4. Give the therapeutic uses of *aletris farinosa*.
5. Give the therapeutic uses of *viburnum prunifolium*.

**Practice.**

1. Give symptoms and treatment of a typical case of sciatica.
2. How would you treat a case of gonorrhœa?
3. Name three drugs most used for pain and give ordinary dose of each.
4. Give the symptoms of and describe the treatment of acute cerebro-spinal meningitis.
5. Describe the symptoms and treatment of dysentery.

## LIST OF MEDICAL COLLEGES.

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### ALABAMA.

Birmingham Medical College, Birmingham.

### ARKANSAS.

Medical Department, Arkansas Industrial University, Little Rock.

### CALIFORNIA.

Cooper Medical College, San Francisco.

Hahnemann Hospital Medical College, San Francisco.

College of Medicine, University of California, Los Angeles.

### COLORADO.

Gross Medical College, Denver.

University of Denver, Medical Department, Denver.

University of Colorado, Denver.

### CONNECTICUT.

Medical Department, Yale University, New Haven.

### DISTRICT OF COLUMBIA.

University of Georgetown, Medical Department, Washington.

The National Homoeopathic Medical College, Washington.

National Medical College, Medical Department of the Columbian University, Washington.

National University, Washington.

Howard University, Medical Department, Washington.

\*Post Graduate School of Medicine of the District of Columbia, Washington.

### GEORGIA.

Georgia College of Eclectic Medicine and Surgery, Atlanta.

Atlanta Medical College, Atlanta.

Southern Medical College, Atlanta.

### ILLINOIS.

Hahnemann Medical College and Hospital, Chicago.

Bennett College of Eclectic Medicine and Surgery, Chicago.

Rush Medical College, Chicago.

Chicago Physio-Medical College, Chicago.

Chicago Homoeopathic Medical College, Chicago.

Dunham Medical College, Chicago.

The Hering Medical College, Chicago.

Harvard Evening Medical College, Chicago.

Chicago Medical University, Chicago.

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\*Post graduate institution.

Harvey Medical College, Chicago.  
College of Physicians and Surgeons, Chicago (Univ. of Illinois, Med. Dept.)  
Northwestern University Medical College (Chicago Medical College).  
National Medical College, Chicago.  
Woman's Medical College, Chicago.  
\*Chicago College of Ophthalmology and Otology, Chicago.  
\*Chicago Polyclinic, Chicago.  
\*Post Graduate Medical School and Hospital of Chicago, Chicago.

#### INDIANA.

Indiana Medical College, Indianapolis.  
Fort Wayne College of Medicine, Fort Wayne.  
American Medical College, Indianapolis.  
Physio-Medical College, Indianapolis.

#### IOWA.

Medical Department, State University of Iowa, Iowa City.  
Iowa College of Physicians and Surgeons, Medical Department of Drake University, Des Moines.  
Keokuk Medical College, Keokuk.  
Homoeopathic Medical Department, State University of Iowa, Iowa City.  
Sioux City College of Medicine, Sioux City.

#### KENTUCKY.

University of Louisville.  
Hospital College of Medicine, Louisville.  
Louisville Medical College, Louisville.  
Louisville National Medical College, Louisville.  
Kentucky School of Medicine, Louisville.  
Southwestern Homoeopathic College, Louisville.  
Central University of Kentucky, Medical Department, Louisville.  
College of Medicine and Surgery, Louisville.

#### LOUISIANA.

Medical Department, Tulane University of Louisiana, New Orleans.  
New Orleans Polyclinic, New Orleans.

#### MARYLAND.

Baltimore University School of Medicine, Baltimore.  
Johns Hopkins University, Medical Department, Baltimore.  
College of Physicians and Surgeons, Baltimore.  
Baltimore Medical College, Baltimore.  
University of Maryland School of Medicine, Baltimore.  
Washington University, Baltimore.  
Woman's Medical College of Baltimore, Baltimore.  
Southern Homoeopathic Medical College, Baltimore.  
Homoeopathic Medical College, Baltimore.

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\*Post graduate institution.

**MASSACHUSETTS.**

Tufts College Medical School, Boston.  
College of Physicians and Surgeons, Boston.  
Boston University School of Medicine, Boston.  
Harvard University Medical School, Boston.

**MICHIGAN.**

University of Michigan, Medical Department, Ann Arbor.  
Homoeopathic Medical College of the University of Michigan, Ann Arbor.  
Detroit College of Medicine, Detroit.

**MINNESOTA.**

University of Minnesota, Medical Department, Minneapolis.

**MISSOURI.**

St. Louis Medical College, St. Louis.  
St. Louis College of Physicians and Surgeons, St. Louis.  
Missouri Medical College, St. Louis.  
Eclectic Medical College, St. Louis.  
Kansas City Homoeopathic Medical College, Kansas City.  
Marion-Sims College of Medicine, St. Louis.  
Woman's Medical College, Kansas City.  
St. Louis Woman's Medical College and Hospital, St. Louis.  
University Medical College, Kansas City.  
American Medical College (Eclectic), St. Louis.  
Barnes Medical College, St. Louis.  
Beaumont Hospital Medical College, St. Louis.  
Homoeopathic Medical College of Missouri, St. Louis.

**NEBRASKA.**

Medical Department, Cotner University, Lincoln.  
Omaha Medical College, Omaha.  
John A. Creighton Medical College, Omaha.

**NEW HAMPSHIRE.**

Dartmouth Medical College, Hanover.

**NEW YORK.**

College of Physician and Surgeons, Medical Department, Columbia University,  
New York.  
College of Medicine, Syracuse University, New York.  
\*Bellevue Hospital Medical College, New York.  
Eclectic Medical College of the City of New York.  
Long Island College Hospital, Brooklyn.  
New York Medical College and Hospital for Women, New York.  
University of the City of New York Medical Department, New York (until 1896).  
University of Buffalo, Buffalo.  
New York Homoeopathic Medical College and Hospital, New York.  
Columbia College, New York.  
Albany Medical College, Albany.

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\*1898<sup>1</sup> combined with University Medical College under title of The University and Bellevue Hospital Medical College.

- \*Drs. Ephram Cutter and Son, New York.
- \*Mothers' and Babies' Hospital Obstetric School, New York.
- \*New York Polyclinic Medical School and Hospital, New York.
- \*New York Post Graduate Medical School and Hospital, New York.
- Woman's Medical College of the New York Infirmary for Women and Children,  
New York.

#### OHIO.

- Eclectic Medical Institute, Cincinnati.
- The Laura Memorial College, Cincinnati.
- Medical Department, Western Reserve University, Cleveland.
- Toledo Medical College, Toledo.
- Pulte Medical College, Cincinnati.
- Cincinnati College of Medicine and Surgery, Cincinnati.
- Cleveland University of Medicine and Surgery, Cleveland.
- Cleveland Medical College, Cleveland.
- Medical Department University of Wooster, Cleveland.
- Miami Medical College, Cincinnati.
- Columbus Medical College, Columbus.
- Ohio Medical University, Columbus.
- Cleveland College of Physicians and Surgeons, Cleveland. (Medical Department  
Wesleyan University.)
- Medical College of Ohio, Cincinnati.
- Starling Medical College, Columbus.
- Western Homoeopathic College, Cleveland.
- College of Medicine, Lebanon.
- \*Elsberg Nose, Throat and Ear Dispensary and Clinical School of Rhinology,  
Larynology and Otology, Cincinnati.
- \*Hygiea Medical College, Cincinnati.

#### PENNSYLVANIA.

- Western Pennsylvania Medical College, Pittsburgh. (University of Western  
Pennsylvania.)
- Medico-Chirurgical College, Philadelphia.
- Jefferson Medical College, Philadelphia.
- University of Pennsylvania, Medical Department, Philadelphia.
- Hahnemann Medical College, Philadelphia.
- Woman's Medical College of Pennsylvania, Philadelphia.
- Philadelphia University of Medicine and Surgery.
- \*Philadelphia Polyclinic and College for Graduates in Medicine, Philadelphia.

#### SOUTH CAROLINA.

- Medical College of the State of South Carolina, Charleston.
- Charleston Medical School, Charleston.

#### TENNESSEE.

- Sewanee Medical College University of the South, Sewanee.
- Chattanooga Medical College, Chattanooga.
- Medical Department, University of Tennessee, Nashville.
- Memphis Hospital Medical College, Memphis.
- Medical Department University of Nashville, Nashville.
- Medical Department Vanderbilt University, Nashville.
- Tennessee Medical College, Knoxville.

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\*Post graduate institution.



## VERMONT.

University of Vermont, Medical Department, Burlington.

## VIRGINIA.

Medical College of Virginia, Richmond.

University College of Medicine, Richmond.

University of Virginia Medical Department, Charlottesville.

## WISCONSIN.

Eclectic Medical College, Milwaukee.

Milwaukee Medical College and School of Dentistry, Milwaukee.

Wisconsin College of Physicians and Surgeons, Milwaukee.

## FOREIGN SCHOOLS.

University of Havana, Cuba.

Royal College of Physicians and Surgeons, Dublin, Ireland.

Royal Hungarian University, Budapest, Hungary.

Imperial University of Warsaw, Poland.

University of Naples, Italy.

Trinity University, Medical Department, Toronto, Ontario, Canada.

University of Berne, Switzerland.

University of Berlin, Germany.

University of Bonn, Germany.

University of Munich, Germany.

Gale University, Montreal, Canada.

University of Toronto, Canada.

Western University, Ontario, Canada.

University of Palermo, Italy.

Royal University of Pisa, Italy.

Regia University of Naples, Italy.

University of Glasgow, Scotland.

St. Petersburg Medical College, Russia.

University of Vienna, Austria.

University of Paris, France.

Royal Superior Institute of Florence, Italy.

University of Brussels, Austria.

McGill University, Montreal, Canada.

Queen's Medical College, Kingston, Canada.

**QUESTIONS USED BY THE STATE EXAMINERS IN THE PRELIMINARY LITERARY EXAMINATION OF THOSE WHO EXPECT TO PRACTICE MEDICINE IN PENNSYLVANIA.**

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**(Sample Questions.)**

**United States History.**

Name the European nations that were specially active in making explorations in America.

How did the New World come to be called America? What should it have been called? Why?

Give an account of the introduction of slavery into the United States.

Name the thirteen original colonies.

When did the Constitution of the United States go into effect? How was it adopted? In what year was Washington inaugurated President.

What were The Articles of Confederation, and during what period of history were they in force?

Give the names of two famous American inventors, stating the invention of each, three distinguished American statesmen; and three great American orators.

How did Alaska become a part of the United States? What was the "Louisiana Purchase," and what extent of territory did it cover?

Name two noted American prose writers of the period before the Civil War. Two celebrated American poets, indicating one poem of each.

Of how many Senators is the United States Senate composed at the present time? Who are the Senators from Pennsylvania? How are they chosen and how long do they serve?

State what parts of North America were settled by the French. What parts were settled by the Spanish.

Tell what important events are associated with the following names, and mention one or more persons associated with each: Valley Forge, Providence, Bunker Hill, Quebec.

Name three of the most important battles of the Revolution, and tell why you consider each important.

Explain in what way the United States acquired possession of the territory now occupied by the following States, respectively: Florida, Nevada, Arkansas.

State the principal reasons that led to the adoption of the present Constitution of the United States.

Explain what is meant by each of the following terms:

- (a) Monroe Doctrine.
- (b) Stamp Act.
- (c) Tariff.

State the causes and results of the Mexican War.

Mention three important events that occurred on the Mississippi river during the Civil War. Tell why each was important.

Trace Washington through the War of the Revolution.

Give an account of the war of 1812—its causes and results.

Give an account of the Hartford Convention.

Give an account of the annexation of Texas—Causes and results.

Explain the terms of the Kansas-Nebraska bill.

Explain the terms of the Dred Scott decision.

Trace Grant through the Civil War.

Explain the causes and results of the Spanish-American war.

Of what departments is the President's Cabinet composed? Which was the last department added to the Cabinet?

For how long a term is the President chosen? What are the constitutional requirements as to his qualifications?

How can a new state be added to the Union? What advantage has a state over a territory?

Name three men who were not soldiers during the Revolution, but who assisted the colonists in securing their independence. Tell briefly what each did.

What were the causes of the French and Indian war? What the result.

What could a Frenchman find in this country as evidence of the occupation of the Mississippi Valley at some time by his nation?

Name five noted American authors. Five of the noted statesmen of the Civil War period. Three of the present period.

What provision has Congress made for the government of the Philippines? Of Porto Rico?

What is the Monroe Doctrine? Why so called?

Name the last five Presidents stating the length of time each served and some important event in the administration of each.

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### Geography.

Define latitude and longitude and explain their uses.

Explain why the tropics and polar circles are located where they are.

Discuss Cuba (a.) Dimensions.

(b.) Climate and products.

(c.) People and civilization.

Is it colder or warmer on the top of a mountain than in the valley below, and why?

Trace the Gulf stream, beginning at Florida, and explain how it is used to facilitate commerce.

Name the countries that touch Brazil.

Name and locate five important British possessions.

Locate the following cities and state the things for which they are noted: Lynn, Lyons, Odessa, Glasgow and Cologne.

For what is Spain noted, and how would you go from Madrid to Manila?

Locate the waters on which one would sail in going from Hamburg to Venice, and name the large seaports on the voyage.

Into what zones is the earth's surface divided?

In what zones does each of the following natural divisions of the earth lie: North America, Australia, Africa?

Tell how you would find from a map the latitude and longitude of Berlin.

What is the form of government in England? Mexico? Turkey? France? United States?

What natural boundary is there between New York and Canada? Indiana and Kentucky? Norway and Sweden? England and France? Pennsylvania and New Jersey?

Name five of the leading seaports of the United States.

Why are the New England states so extensively engaged in manufacturing?

Name two leading exports of the Southern States. Three of the Middle Atlantic States.

What causes day and night? What is meant by the equinoxes? When do they occur?

Name the principal minerals of Pennsylvania? Give some reasons for the phenomenal growth of Chicago.

Locate the torrid zone. Explain the general causes of the climate which prevails in that zone.

Explain briefly the causes of the change of seasons.

Name and locate a city of Europe, in about the same latitude as Philadelphia; a city of Asia.

What states border on the Great Lakes? How can their products be transported by water to Atlantic seaports?

Name two important commercial products of South America. From what country is each sent?

Name the largest of the Sandwich islands; the largest city; the chief article of export.

Name the countries of Europe that border on Russia, name the bodies of water.

Name and locate an important seaport of Australia; of India; of Africa.

On what bodies of water did Admiral Dewey sail during his recent voyage from Manila to New York?

What is a republic? Name two republics in the Eastern Continent; three in the Western Continent.

Which are the New England States?

Which of them has no sea-coast?

Name and locate two important cities of these states.

Name three large rivers of the Pacific Slope of the United States.

In regard to South America, tell:

(a) What part of it has the coldest climate?

(b) What part has a climate much like our own?

(c) The name and location of two of its capes.

In what direction, and over what waters would a vessel sail in going from New York to London?

Tell where Japan is and name its Capitol. Mention some commodities which the Japanese largely export.

What waters are connected by the Suez Canal?

Why is this canal important?

Name and locate two European cities that are of great commercial importance.

To what country does Australia belong?

Name two of its chief cities.

Mention two of its important industries.

Name two rivers that flow into the Baltic Sea.

Name two rivers that flow into the Mediterranean Sea.

State the general direction from Philadelphia of each of the following places: Montreal, Chicago, New Orleans, Boston.

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### Arithmetic.

(a.) Write in figures, forty billion, six hundred and seventy-nine million twenty-nine.

(b.) Write in words, 81,408,000,025.

Simplify

$$\frac{.7\frac{1}{2} + 15\frac{1}{2} - 8\frac{1}{4}}{4.5 + 7 - 7.5}$$

(a.) Extract the square root of .144.

(b.) Extract the cube root of .1728.

A bicycle wheel is 2.75 meters in circumference; how many revolutions will it make in going five miles?

The sum of \$5,000 was put at (simple) interest, at 6 per cent., for a child 4 years and 4 months old. What sum (in interest) will be due the child when he becomes 21 years old?

It was found after a rain, that water had fallen to the depth of one-fourth of an inch. How many gallons fell in a square field, which was inclosed by 400 panels of fence, each ten feet?

From six million eighteen thousand twenty, take one hundred nine thousand eight hundred seven.

Divide 6.25 by 12.5 and multiply the result by 3.75.

After spending  $6\frac{1}{4}$  per cent. of my money I gave \$5.00 to a charitable purpose. If I then had eleven dollars remaining, how much had I at first?

At the rate of  $8\frac{1}{2}$  pounds of sugar for  $38\frac{1}{2}$  cents, how much sugar can I buy for \$1.00?

I wish to carpet a room 18 feet long and 15 feet wide with carpet  $5\text{--}8$  of a yard in width, how much will it cost at \$1.25 a yard? Which way of laying the stripes will be least expensive?

What difference, if any, exists between a pound avoirdupois and a pound apothecaries weight?

From  $6\frac{1}{2} \times 3$   $2\text{--}3 \times 4$   $1\text{--}8$  take  $8\text{--}7\text{--}12$ .

If I buy alcohol at \$3.20 a gallon, at what price must I sell it per pint in order to gain 20 per cent?

(a) Write in figures one hundred five billion eighty million twenty-five thousand forty.

(b) Write in words 10,025.075.

From a piece of cloth containing  $28\frac{1}{2}$  yards there have been sold  $7\frac{3}{4}$  yards and  $12\text{--}5\text{--}8$  yards. The cloth remaining is worth \$8.12 $\frac{1}{2}$ . What was the value of the whole piece?

How many 4-grain pills can be made from 1 drachm 2 scruples of quinine? How much are they worth at 50c. a hundred?

A druggist bought 10 liters of brandy at \$1.50 a liter and sold it at \$2 a quart. How much profit did he make?

I bought some silk at \$1.25 a yard and marked it to sell at 20 per cent. profit. How much will I clear if I sell it at 10 per cent. less than I marked it?

A horse trough 6 feet long, 1 foot wide, and 18 inches deep is half full of water. How many gallons (231 cu. in.) are there in the trough?

From 10 take 3.025, and multiply the remainder by .008.

How many drops each weighing 2 grains are in a phial containing 4 oz., 2 scr. of mercury?

At one dollar per quart, what is the value of 5 litres of wine?

By selling a horse for \$150, I gained 25 per cent. of the price paid for him. How many dollars would I have lost by selling him for \$115?

If you borrow to-day \$200 on a note for 3 months at 5 per cent., on what day will your note become due? What amount will be needed to pay your debt?

The surface of a sheet of paper is 143 square inches. If the sheet is 13 inches long, how many feet of string are needed to reach around the edges?

At 5 cents a quart, what is the value of the oil in a vessel 2 feet long, 1 1-3 feet wide, and 9 inches deep, a gallon containing 231 cubic inches?

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### English Grammar.

Write a simple sentence. Name the whole subject and whole predicate.

Neither he [<sub>nor</sub><sup>or</sup>] his brother [<sub>have</sub><sup>has</sup>] any affection for you or [<sub>me</sub><sup>I</sup>]. Select the proper words from those placed within the brackets, and rewrite the sentence.

Suppose that John Smith sells to you to-day two articles from his grocery store. Make out and receipt the bill.

### THE CORN SONG.

1. Through vales of grass and meads of flowers,  
Our plows their furrows made;  
While on the hills, the sun and showers  
Of changeful April played.

2. And now, with autumn's moonlit eves,  
Its harvest time has come;  
We pluck away the frosted leaves,  
And bear the treasure home.

—John G. Whittier.

- Find an adjective in stanza 1. Compare it.
- What pronouns are used in stanza 2? Tell what kind each is. In what number, person, gender, and case is each?
- Name the verb in lines 1-2, stanza 2. Classify it. Tell its mood and tense, and give your reasons.
- What is meant by vales of grass (line 1)? By changeful April (line 4)? By moonlit eves (line 5)? By treasure (line 8)?
- Change Autumn's (line 5) into a phrase and re-write the line, using your phrase.

Write a letter to a friend telling him what you know about William Penn.



Write the possessive, singular and plural of the following words and characters: Jones, Morris, goose, sheep, grass, ice, A. O. S. U. 3, 5, 7, 8.

State the different ways in which the infinitive phrase is used, and illustrate each with an example.

State the different ways in which the noun clause may be used and give examples.

Are the following sentences correct, and if not, why.

(a) Each of the expressions denote action.

(b) Books are a noun in most sentences.

(c) Nine-tenths of every man's happiness depend upon his common sense.

(d) Every one of these are good in their place.

Analyze the following, and parse underscored words:

*Who* in the darkest days of our Revolution, *carried* your flag into the very *chops* of the *British* channel, *bearded* the lion in his den, and woke the echoes of all Albion's hills by the thunder of his cannon.

Make two sentences, each with a verb in the indicative mode, past perfect tense, second person, plural number.

Write two sentences, each with a verb in the potential mood, past perfect tense, second person, plural number.

Write a short essay on the importance of correct habits of living.

Write the following in good prose:

The breaking waves dashed high  
On a stern and rock-bound coast,  
And the woods against a stormy sky  
Their giant branches tossed.

And the heavy night hung dark  
The hills and waters o'er  
When a band of exiles moored their bark  
On the wild New England shore.

Not as the conqueror comes,  
They the true-hearted came;  
Not with the roll of the stirring drums,  
And the trumpet that sings of fame.

For what purpose are the words stern, stormy and giant used? In the second stanza what is meant by "heavy night," and "hung dark?" Parse true-hearted in the third stanza.

Rewrite the following, underlining any corrections you may have made:

Those boys hats and that girls gloves were never found.  
We could not be sure of it being him.

Every advice given him was thrown away.

The sun and the fires heat differ.

The love of money that has been called the root of all evil causes untold misery.

He didn't know whom he wanted.

What kind of a sentence is this.

I saw a hot and cold spring not twenty feet apart.

He that was dead set up and talked.

Every collegiate is not a scholar.

Complete these sentences by inserting a phrase which fills the office described by the word in brackets:

The barking of the dogs was heard (when)

The deer lifted his head (how)

The roses (where) bloom abundantly (when)

The whole party went (where) (why)

He obtained the confidence of his employers (how)

Name the mood, the tense and the subject of all verbs in the following:

Flocks of little birds, wheeling around the lighthouse, blinded and maddened by the light, dashed themselves to death against the glass.

Columbus had thought about his plan for many years, during which he had sought help from royal courts.

I know what you should say; but will you say it?

What can they see in the longest kingly line in Europe, save that it reaches back to a successful soldier.

Define participle and infinitive and illustrate the different kinds of each.

Write the present and past participles of the following words: Sink, Shake, Abide, Beseech, Dive, Dream, Forbear, Knit.

In the following sentences tell the mood, tense, person and number of the verb. Ye have been, You had been, They will have been, They may have been, If he were, If thou wert.

Write the possessive singular and plural of the following words and characters: George, Horse, Eagle, Fox, M, R, 8, 6.

Define abstract and verbal nouns. Give examples.

Write a sentence containing an adverbial clause. One containing an objective clause.

Analyze the following sentences and parse the words in italics:

The whole winged insect tribe, it is *probable*, *are* equally *intent upon* their proper enjoyments; and *under* every variety of constitution *gratified*, and *perhaps* equally gratified, by the offices which the author of their nature has *assigned* to them.

*There* was another coach *that* went *along* with us, in which I *like*-

*wise* observed *that there* were many secret jealousies, *heart-burnings* and animosities; for *when* we joined companies at night, I *could not but take* notice that the passengers neglected their own company.

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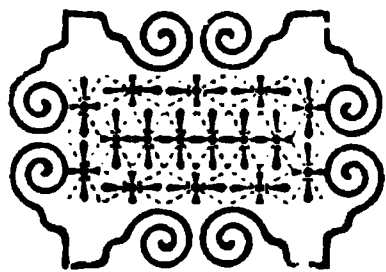
### Spelling.

Inflammation.  
Received.  
Promissory.  
Shadow.  
Benefited.  
Wrist.  
Fuchsia.  
Repentance.  
Typhoid.  
Pasteboard.  
Chandelier.  
Bananas.  
Crystallize.  
Bicycle.  
Hygiene.  
Meningitis.  
Coercion.  
Believe.  
Parallel.  
Glycerine.  
Belligerent.  
Miracle.  
Deficit.  
Valuable.  
Changeable.  
Chronic.  
Analyze.  
Patient.  
Sincere.  
Juicy.  
Beginning.  
Awkward.  
Surgeon.  
Physician.  
Appetite.  
Thorough.

Cellar.  
Cottage.  
Hospital.  
Druggist.  
Oxygen.  
Muscle.  
Fatigue.  
Imperial.  
Requisite.  
Valley.  
Medicinal.  
Telephone.  
Committee.  
Convenience.  
Allopathy.  
Cigarette.  
Rheumatic.  
Nutritious.  
Salable.  
Etiquette.  
Privilege.  
Judicious.  
Traceable.  
Phlegm.  
Synovial.  
Susceptible.  
Cartilage.  
Jaundice.  
Twelfth.  
Excretion.  
Embarrass.  
Gauge.  
Maintenance.  
Apparatus.  
Membrane.  
Sensory.

Corpuscles.  
Effervesce.  
Nourishment.  
Raspberries.  
Tissues.  
Nicotine.  
Arsenic.  
Grateful.  
Wrapper.  
Veins.  
Capillaries.

Magnifying.  
Blurred.  
Flannel.  
Contagious.  
Paregoric  
Valuable.  
Guerrilla.  
Ordnance.  
Receive.  
Fever.  
Measles.



APPENDIX R.

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# Meteorological Observations

OF THE

## Weather Bureau.

BY

T. F. TOWNSEND,

SECTION DIRECTOR, PHILADELPHIA, PA.







TOTAL PRECIPITA

4"

4"

3"

2

SCALE OF SHA



Under 1

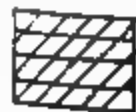


3 to 5

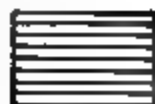
ATION, JANUARY, 1899.

2"

ES, IN INCHES.



3 to 4



Over 4



## JANUARY, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.18 inches, is .05 above the normal. At the United States Weather Bureau stations the highest observed was 30.96 inches, at Harrisburg and Philadelphia, on the 2d, and the lowest, 29.38 inches, at Philadelphia, on the 24th.

### Temperature.

The means of the daily maximum and minimum temperatures, 35.8 and 17.3 degrees respectively, give a monthly mean of 26.6 degrees, which is 1.4 degrees below the normal, and 4.1 degrees below the corresponding month of 1898.

The average daily range was 18.5 degrees.

The highest monthly mean was 32.4 degrees, at Philadelphia.

The lowest monthly mean was 20.6 degrees, at Dyberry.

The highest temperature recorded during the month was 66 degrees, on the 4th, at Pittsburgh, and on the 5th at Lycippus.

The lowest temperature was minus 21 degrees, on the 2d, at Du-shore.

The greatest local monthly range was 81 degrees, at Derry Station.

The least local monthly range was 49 degrees, at Philadelphia, Centennial avenue.

The greatest daily range was 55 degrees, at Lewisburg.

### Precipitation.

The average precipitation for the month, 3.05 inches, is 0.15 inches less than the normal.

The largest totals of rainfall and melted snow, in inches were: Browsers Lock, 4.84; Kennett Square, 4.82; Coopersburg, 4.73; West Chester, 4.71; Uniontown, 4.28; Forks of Neshaminy, 4.25; Derry Station, 4.25. The least were: Franklin, 0.82; Shingle House, 1.18; Williamsport, 1.46; Erie, 1.50; Selinsgrove, 1.76; Towanda, 1.80.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 10; clear, 12; partly cloudy, 8; cloudy, 11.

#### Corrections.

For November, 1898.—Total precipitation at Greensboro should be 2.66 instead of 2.78 inches.

For December, 1898.—Mean temperature at Hawley should be 27.8 instead of 28.3, and on page 4, the departure in precipitation should be 0.16 instead of 1.56 inches.

Climatological Data for Pennsylvania, January, 1899.

| Stations.             |               | Counties. |       | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |
|-----------------------|---------------|-----------|-------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|
|                       |               |           |       |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date  | Lowest. | Date. |
| Altoona, a,           | Blair,        | 1,181     | 12    | 25.1             | -1.2                     | 53                                  | 5                          | -12      | 2     | 41      |       |
| Aqueduct,             | Perry,        | 367       | 11    | 28.3             | -2.4                     | 53                                  | 15                         | -7       | 2     | 34      |       |
| Athens,               | Bradford,     | 768       | ..... | 22.4             | .....                    | 52                                  | 5                          | -8       | 2     | 36      |       |
| Brookville,           | Jefferson,    | 1,173     | 15    | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   |       |
| Carlisle,             | Cumberland,   | 480       | 52    | 26.4             | -1.8                     | 49                                  | 22                         | -8       | 2     | 32      |       |
| Cassandra,            | Cambria,      | 2,100     | ..... | 27.2             | .....                    | 59                                  | 4                          | -8       | 2     | 38      |       |
| Center Hall,          | Centre,       | 1,100     | ..... | 26.2             | .....                    | 52                                  | 5                          | -12      | 2     | 33      |       |
| Chambersburg,         | Franklin,     | 1,660     | 37    | 26.5             | -2.1                     | 51                                  | 5                          | -15      | 2     | 39      |       |
| Coatesville,          | Chester,      | 380       | 12    | 29.8             | -0.3                     | 55                                  | 5                          | -7       | 2     | 39      |       |
| Confluence,           | Somerset,     | 1,324     | 25    | .....            | .....                    | .....                               | .....                      | -13      | 2     | .....   |       |
| Coopersburg,          | Lehigh,       | 520       | 10    | 29.4             | -0.9                     | 55                                  | 15                         | -8       | 3     | 48      |       |
| Derry Station,        | Westmoreland, | 1,172     | ..... | 28.7             | .....                    | 64                                  | 5                          | -17      | 2     | 53      |       |
| Drifton,              | Luzerne,      | 1,633     | ..... | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   |       |
| Dushore,              | Sullivan,     | 1,590     | ..... | 22.0             | .....                    | 49                                  | 5                          | -21      | 2     | 39      |       |
| Dyberry,              | Wayne,        | 1,100     | 35    | 20.6             | -0.6                     | 50                                  | 5                          | -19      | 2     | 40      |       |
| Easton,               | Northampton,  | 325       | 16    | 26.6             | -0.1                     | 50                                  | 5                          | -3       | 2     | 32      |       |
| Emporium a,           | Cameron,      | 1,050     | 12    | 23.4             | -3.7                     | 58                                  | 5                          | -12      | 11    | 37      |       |
| Erle,                 | Erie,         | 1,400     | 26    | 26.0             | .....                    | 63                                  | 4                          | -6       | 31    | 29      |       |
| Everett,              | Bedford,      | 1,060     | ..... | 23.2             | .....                    | 57                                  | 5                          | -15      | 2     | 39      |       |
| Forks of Neshaminy 1, | Bucks,        | 304       | 11    | 29.7             | -2.5                     | .....                               | .....                      | .....    | ..... | .....   |       |
| Franklin,             | Venango,      | 955       | 24    | 25.7             | +2.6                     | 62                                  | 5                          | -13      | 11    | 42      |       |
| Gramplan,             | Clearfield,   | 1,450     | 36    | 22.6             | -0.4                     | 52                                  | 4                          | -12      | 2     | 32      |       |
| Greensboro,           | Greene,       | 768       | 11    | 31.6             | .....                    | 65                                  | 4                          | -3       | 1     | 39      |       |
| Hamburg,              | Berks,        | 380       | 9     | 26.2             | -3.8                     | 48                                  | 22                         | -6       | 2     | 33      |       |
| Hamlington,           | Wayne,        | 1,600     | 11    | 23.6             | -1.9                     | 49                                  | 23                         | -10      | 11    | 36      |       |
| Harrisburg,           | Dauphin,      | 561       | 11    | 28.6             | -1.4                     | 54                                  | 5                          | 1        | 2     | 26      |       |
| Hawley,               | Wayne,        | .....     | ..... | 23.2             | .....                    | 54                                  | 4                          | -17      | 2     | 50      |       |
| Holidaysburg,         | Blair,        | 947       | 12    | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   |       |
| Huntingdon a,         | Huntingdon,   | 650       | 12    | 28.2             | -0.4                     | 57                                  | 3                          | -17      | 2     | 40      |       |
| Indiana,              | Indiana,      | 1,350     | 6     | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   |       |
| Irwin,                | Westmoreland, | 884       | ..... | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   |       |
| Johnstown,            | Cambria,      | 1,184     | 12    | 29.3             | -1.2                     | 61                                  | 5                          | -8       | 2     | 38      |       |



Climatological Data for Pennsylvania, January, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 276              | 10                       | 30.6                                | +0.3                       | 54       | ..... | -6      | ..... | 37                    |
| Lawrenceville, .....          | Tioga, .....        | 1,006            | .....                    | .....                               | .....                      | 53       | ..... | .....   | ..... | 43                    |
| Lebanon a, .....              | Lebanon, .....      | 458              | 12                       | 26.3                                | -1.7                       | 50       | ..... | -14     | ..... | .....                 |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 21.5                                | -2.5                       | 50       | ..... | -8      | ..... | 30                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 25.0                                | +0.1                       | 50       | ..... | -20     | ..... | 55                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 26.7                                | -1.7                       | 53       | ..... | 14      | ..... | 39                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 28.8                                | -0.1                       | 66       | ..... | .....   | ..... | 40                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 24.5                                | -3.1                       | 49       | ..... | -9      | ..... | 42                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 32.4                                | +0.4                       | 56       | ..... | 6       | ..... | 29                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 32.4                                | +0.1                       | 55       | ..... | 6       | ..... | 23                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 31.0                                | .....                      | 66       | ..... | 5       | ..... | 28                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 27.0                                | -0.1                       | 51       | ..... | -13     | ..... | 45                    |
| Reading 2, .....              | Berks, .....        | 280              | 20                       | .....                               | -3.0                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 26.2                                | .....                      | 59       | ..... | -6      | ..... | 36                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 27.4                                | +4.1                       | 57       | ..... | -18     | ..... | 46                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 24.1                                | .....                      | 51       | ..... | -15     | ..... | 32                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 25.9                                | -3.5                       | 50       | ..... | -13     | ..... | 31                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 22.2                                | -1.6                       | 43       | ..... | -15     | ..... | 33                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 24.4                                | -1.7                       | 58       | ..... | -13     | ..... | 38                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | 27.3                                | -2.1                       | 49       | ..... | -3      | ..... | 36                    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 24.7                                | -1.8                       | 55       | ..... | -14     | ..... | 31                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 25.0                                | -1.6                       | 56       | ..... | -9      | ..... | 30                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | -11     | ..... | .....                 |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 29.3                                | -0.7                       | 54       | ..... | -2      | ..... | 30                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Towanda, .....                | Bradford, .....     | 764              | .....                    | 24.0                                | .....                      | 53       | ..... | -15     | ..... | 37                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 30.8                                | -2.0                       | 65       | ..... | -8      | ..... | 34                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 24.4                                | .....                      | 50       | ..... | -14     | ..... | 35                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 23.3                                | -1.2                       | 52       | ..... | -12     | ..... | 36                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 30.3                                | +0.3                       | 54       | ..... | 1       | ..... | 28                    |

|                     |                 |       |       |      |       |    |     |   |    |
|---------------------|-----------------|-------|-------|------|-------|----|-----|---|----|
| Westtown, .....     | Chester, .....  | 350   | 11    | 28.3 | -3.6  | 55 | -5  | 2 | 30 |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | 21.9 | ..... | 56 | -14 | 2 | 27 |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 26.3 | -0.7  | 59 | -6  | 2 | 27 |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 26.5 | -0.1  | 55 | -9  | 2 | 30 |
| York, .....         | York, .....     | 395   | 13    | 28.7 | -0.9  | 55 | -11 | 2 | 30 |

\*Extremes of temperature from observed readings of dry thermometers.  
1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 8 p. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, January, 1899—Continued.

| Stations.                   | Counties.           | Precipitation, in inches.  |                       |                            |                    |       | Sky.               |                            |                     | Prevailing direction of wind. | Observers.             |
|-----------------------------|---------------------|----------------------------|-----------------------|----------------------------|--------------------|-------|--------------------|----------------------------|---------------------|-------------------------------|------------------------|
|                             |                     | Total.                     |                       |                            |                    |       | Number clear days. | Number partly cloudy days. | Number cloudy days. |                               |                        |
|                             |                     | Departure from the normal. | Greatest in 24 hours. | Total snowfall (unmelted). | Number rainy days. |       |                    |                            |                     |                               |                        |
| Altoona a, .....            | Blair, .....        | 2.41                       | -0.77                 | 0.95                       | .....              | 11    | .....              | .....                      | .....               | .....                         | Dr. C. B. Dudley.      |
| Aqueduct, .....             | Perry, .....        | 2.50                       | -0.10                 | 1.24                       | 10.8               | 8     | 11                 | 7                          | 13                  | SW                            | Richard Callin.        |
| Athens, .....               | Bradford, .....     | 2.53                       | .....                 | 1.00                       | 11.5               | 7     | 16                 | 9                          | 6                   | SW                            | F. L. Estabrook.       |
| Brookville, .....           | Jefferson, .....    | 2.70                       | -0.31                 | 0.61                       | 13.9               | 13    | 22                 | 0                          | 9                   | W                             | H. E. Darr.            |
| Carlisle, .....             | Cumberland, .....   | 3.41                       | -0.18                 | 1.00                       | 12.0               | 11    | 17                 | 5                          | 9                   | W                             | J. E. Pague.           |
| Cassandra, .....            | Cambria, .....      | 2.87                       | .....                 | 0.76                       | 12.5               | 11    | 0                  | 21                         | 10                  | NW                            | A. H. Boyle.           |
| Center Hall, .....          | Centre, .....       | 2.07                       | .....                 | 0.60                       | 9.5                | 6     | 17                 | 2                          | 12                  | .....                         | Fred. Kurtz.           |
| Chambersburg, .....         | Franklin, .....     | 1.92                       | -0.19                 | 0.67                       | 1.0                | 11    | 11                 | 7                          | 13                  | W                             | J. C. Boggs.           |
| Coatesville, .....          | Chester, .....      | 3.57                       | -0.43                 | 1.40                       | 3.8                | 10    | 18                 | 2                          | 11                  | S                             | W. T. Gordon.          |
| Confluence, .....           | Somerset, .....     | 4.87                       | -0.46                 | 0.85                       | 9.0                | 15    | 7                  | 1                          | 23                  | W                             | Dr. M. Tannehill.      |
| Coopersburg, .....          | Lehigh, .....       | 4.73                       | +0.50                 | 1.36                       | 12.5               | 11    | 16                 | 7                          | 8                   | NW                            | Dr. M. H. Boye.        |
| Derry Station, .....        | Westmoreland, ..... | 4.25                       | .....                 | 1.03                       | 16.5               | 12    | 13                 | 6                          | 12                  | E                             | D. M. Wineman.         |
| Drifton, .....              | Luzerne, .....      | .....                      | .....                 | .....                      | .....              | ..... | .....              | .....                      | .....               | .....                         | Eckley B. Cox, Jr.     |
| Dushore, .....              | Sullivan, .....     | 1.94                       | .....                 | 0.52                       | 3.8                | 7     | 16                 | 1                          | 14                  | SW                            | C. E. Molyneux.        |
| Dyberry, .....              | Wayne, .....        | 2.19                       | -1.04                 | 0.68                       | 11.5               | 8     | 8                  | 13                         | 10                  | W                             | Theodore Day.          |
| Easton, .....               | Northampton, .....  | 4.03                       | +0.34                 | 1.56                       | 8.0                | 10    | 15                 | 3                          | 13                  | .....                         | Prof. J. W. Moore.     |
| Emporium a, .....           | Cameron, .....      | 2.91                       | -0.42                 | 0.78                       | 19.4               | 13    | 14                 | 8                          | 9                   | E                             | T. B. Lloyd.           |
| Erle, .....                 | Erle, .....         | 1.50                       | -0.87                 | 0.65                       | .....              | 9     | 1                  | 8                          | 22                  | SW                            | U. S. Weather Bureau.  |
| Everett, .....              | Bedford, .....      | 2.48                       | .....                 | 0.92                       | 9.0                | 11    | 13                 | 9                          | 9                   | W                             | Ralph H. Sweetser.     |
| Forks of Neshaminy 1, ..... | Rucks, .....        | 4.25                       | +0.55                 | .....                      | .....              | 11    | 13                 | 8                          | 10                  | N                             | J. C. Hillman.         |
| Franklin, .....             | Venango, .....      | 0.82                       | -2.06                 | 0.60                       | 8.0                | 3     | 15                 | 8                          | 8                   | W                             | Venango Water Co.      |
| Gramplan, .....             | Clearfield, .....   | 3.12                       | -0.52                 | 0.78                       | 15.0               | 12    | 8                  | 15                         | 8                   | W                             | Nathan Moore.          |
| Greensboro, .....           | Greene, .....       | 3.97                       | +0.94                 | 1.42                       | 16.6               | 14    | 15                 | 4                          | 12                  | S                             | Grant Kramer.          |
| Hamburg, .....              | Berks, .....        | 4.41                       | +0.34                 | 1.28                       | 4.0                | 6     | 7                  | 15                         | 9                   | NW                            | William Shippe.        |
| Hamilton, .....             | Wayne, .....        | 3.10                       | -0.54                 | 0.82                       | 12.0               | 8     | 8                  | 9                          | 14                  | NW                            | T. B. Orchard, M. D.   |
| Harrisburg, .....           | Dauphin, .....      | 2.27                       | -0.50                 | 1.06                       | .....              | 11    | 9                  | 10                         | 12                  | W                             | U. S. Weather Bureau.  |
| Hawley, .....               | Wayne, .....        | 3.52                       | .....                 | 1.10                       | 4.4                | 6     | 13                 | 9                          | 9                   | N                             | L. G. Brandhurst.      |
| Hollidaysburg, .....        | Blair, .....        | .....                      | .....                 | .....                      | .....              | ..... | .....              | .....                      | .....               | .....                         | Prof. J. A. Stewart.   |
| Huntingdon a, .....         | Huntingdon, .....   | 2.61                       | -0.79                 | 0.75                       | 11.5               | 9     | 13                 | 7                          | 11                  | W                             | Prof. W. J. Swigart.   |
| Indiana, .....              | Indiana, .....      | .....                      | .....                 | .....                      | .....              | ..... | .....              | .....                      | .....               | .....                         | Prof. C. B. Robertson. |
| Irwin, .....                | Westmoreland, ..... | 3.31                       | .....                 | 0.90                       | .....              | 14    | 11                 | 4                          | 16                  | .....                         | J. B. Gallagher.       |
| Johnstown, .....            | Cambria, .....      | 4.16                       | +0.11                 | 0.77                       | 15.8               | 22    | 6                  | 10                         | 15                  | S                             | E. C. Lorents.         |

| Kennett Square,        | 4.23  | +1.19 | 1.25  | 7.2   | 12    | 14    | 6     | 11    | NE    | B. P. Kirk.             |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Lawrenceville,         | 1.85  | +0.33 | 1.15  | 15.0  | 10    | 9     | 11    | 10    | SW    | C. P. Darling.          |
| Lebanon,               | 3.67  | -0.67 | 0.60  | 10.0  | 11    | 13    | 8     | 10    | SW    | G. W. Hayes, C. E.      |
| Le Roy,                | 2.19  | -0.67 | 1.00  | 11.2  | 9     | 7     | 14    | 10    | W     | G. W. T. Warburton.     |
| Lawburg,               | 2.55  | -0.93 | 0.63  | 8.5   | 8     | 12    | 10    | 9     | W     | Prof. W. G. Owen.       |
| Lock Haven,            | 2.79  | -0.61 | 1.01  | 13.5  | 15    | 13    | 10    | 13    | N     | Prof. J. A. Robb.       |
| Lycippus,              | 3.65  | +0.44 | 1.00  | 8.3   | 9     | 13    | 6     | 13    | SW    | Murray Forbes.          |
| Mauch Chunk,           | 3.67  | +0.71 | 1.10  | 5.5   | 12    | 10    | 9     | 13    | SW    | E. C. Wintermule.       |
| Philadelphia,          | 4.01  | +0.71 | 1.27  | 6.9   | 13    | 12    | 9     | 10    | SW    | U. S. Weather Bureau.   |
| 123 Centennial Avenue, | 4.13  | +0.57 | 1.13  | 19.2  | 14    | 6     | 13    | 12    | SW    | John Comly.             |
| Pittsburgh,            | 3.41  | +0.38 | 1.13  | 7.0   | 8     | 8     | 13    | 10    | SW    | U. S. Weather Bureau.   |
| Quakertown,            | 3.74  | +0.40 | 1.49  | 7.0   | 8     | 8     | 13    | 10    | SW    | J. L. Hescock.          |
| Reading 2,             | 3.41  | +0.04 | 0.96  | ..... | 11    | ..... | ..... | ..... | ..... | Franklin Yeager.        |
| Reedsville,            | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. K. McDonald.         |
| Renovo,                | 2.66  | ..... | 1.12  | 14.3  | 6     | 14    | 9     | 8     | ..... | Fred. C. Eyster.        |
| Saegertown,            | 2.67  | -0.91 | 1.10  | 11.6  | 10    | 4     | 6     | 21    | NW    | J. G. Apple.            |
| Scranton,              | 3.03  | ..... | 1.63  | 6.0   | 5     | 6     | 12    | 13    | W     | H. E. Paine.            |
| Sellinsgrove,          | 1.78  | -1.53 | 0.50  | 9.5   | 7     | 4     | 17    | 10    | SW    | J. M. Boyer, C. E.      |
| Shingle House,         | 1.18  | ..... | 0.40  | 8.0   | 4     | 10    | 13    | 8     | NW    | H. L. Pearsall.         |
| Smithport,             | 2.50  | -1.02 | 0.50  | 8.0   | 6     | 10    | 9     | 12    | SW    | Armstrong & Brownell.   |
| Somerset,              | 4.20  | -0.24 | 1.00  | 19.2  | 12    | 0     | 13    | 13    | NW    | W. M. Schrock.          |
| South Bethlehem,       | 3.25  | +0.04 | 1.63  | ..... | 4     | 15    | 3     | 12    | W     | C. W. Bachert.          |
| South Eaton,           | 1.98  | -0.85 | 0.81  | 5.0   | 7     | 15    | 6     | 10    | SW    | B. M. Hall.             |
| State College,         | 2.60  | -0.32 | 0.72  | 13.9  | 11    | 15    | 10    | 11    | W     | Prof. Wm. Frear.        |
| St. Marys,             | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Wm. E. Wittman.         |
| Swiftwater,            | 3.25  | -0.41 | ..... | 8.0   | ..... | ..... | ..... | 10    | SW    | Prof. S. J. Cunningham. |
| Towanda,               | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Richard Stee, M. D.     |
| Uniontown,             | 1.80  | ..... | 0.50  | 9.0   | 8     | 19    | 1     | 11    | W     | Hiram E. Bull, C. E.    |
| Warren,                | 4.23  | +0.51 | 1.12  | 13.5  | 12    | 12    | 7     | 11    | SW    | Wm. Hunt.               |
| Wallaboro,             | 3.40  | +0.02 | 1.10  | 12.3  | 13    | 16    | 6     | 9     | W     | James K. Simpson.       |
| West Chester,          | 3.42  | -0.28 | 1.10  | 9.0   | 7     | 12    | 3     | 15    | W     | H. D. Deming.           |
| Westtown,              | 4.71  | +0.31 | 1.33  | 8.8   | 13    | 17    | 2     | 12    | W     | J. C. Green, D. D. S.   |
| White Haven,           | 4.93  | +0.16 | 1.63  | 6.0   | 10    | 18    | 3     | 10    | NW    | J. W. Hutton.           |
| Wilkes-Barre,          | 2.15  | ..... | 0.63  | 5.5   | 7     | 9     | 15    | 7     | S     | C. M. Briggs.           |
| Williamsport,          | 3.21  | -0.19 | 0.82  | 11.0  | 7     | 11    | 2     | 16    | S     | A. W. Betterly, M. D.   |
| York,                  | 1.46  | -1.32 | 0.58  | 6.9   | 7     | 20    | 4     | 7     | W     | G. D. Snyder, C. E.     |
| York,                  | 3.61  | +0.52 | 1.30  | 9.2   | 10    | 16    | 7     | 9     | W     | Mrs. L. H. Grenwald.    |

\*Extremes of temperature from observed readings of dry thermometers.

1. Mean of 7 a. m. + 2 p. m. + 3 p. m. + 4 p. m. + 5 p. m. + 6 p. m. + 7 p. m. + 8 p. m. + 9 p. m. + 10 p. m. + 11 p. m. + 12 m. + 1.

The absence of

A roman letter

for instance, "n"

All records are

normals.

departures are determined by comparison of current data of only such stations as have

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**FEBRUARY, 1899—CLIMATOLOGY OF THE MONTH.**

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**Atmospheric Pressure.**

The mean pressure for the month, 30.09 inches, is .03 below the normal. At the United States Weather Bureau stations the highest observed was 30.72 inches, at Harrisburg, on the 11th, and the lowest, 29.40 inches, at Philadelphia, on the 8th.

**Temperature.**

The means of the daily maximum and minimum temperatures, 31.0 and 14.4 degrees respectively, give a monthly mean of 22.7 degrees, which is 5.9 degrees below the normal, and 6.7 degrees below the corresponding month of 1898.

The average daily range was 16.6 degrees.

The highest monthly mean was 28.1 degrees, at Philadelphia.

The lowest monthly mean was 18.5 degrees, at Dyberry.

The highest temperature recorded during the month was 67 degrees, on the 21st, at Huntingdon.

The lowest temperature was minus 39 degrees, on the 11th, at Lawrenceville.

The greatest local monthly range was 92 degrees, at Lawrenceville.

The least local monthly range was 61 degrees, at Wilkes-Barre.

The greatest daily range was 56 degrees, at Hawley.

**Precipitation.**

The average precipitation for the month, 4.05 inches, is 1.10 inches more than the normal.

The largest totals of rainfall and melted snow, in inches, were: Coatesville, 10.22; Forks of Neshaminy, 8.16; Kennett Square, 8.04; West Chester, 6.95; Girardville, 6.69; York, 6.64. The least were: Shingle House, 0.98; Erie, 1.44; St. Marys, 1.47; Elwood Junction, 1.52; Brookville, 1.71; Parkers Landing, 1.73.

**Wind and Weather.**

The prevailing wind was from the west.

Average number of rainy days, 12; clear, 8; partly cloudy, 7; cloudy, 13.



**TOTAL PRECIPIT.**

4"

**SCALE OF SHADE**



Under 2



2 to 4



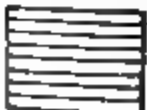
4 to 6



TON, FEBRUARY, 1899.

2"

IN INCHES.



6 to 8



Over 8



Chlimatological Data for Pennsylvania, February, 1899.

| Stations.                   | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-----------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                             |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Altoona, .....              | Blair, .....        | 1,181            | 12                       | 21.3                                | -5.2                       | 59       | 21    | -20     | 10    | 42                    |
| Aqueduct, .....             | Perry, .....        | 367              | 11                       | 25.8                                | -6.4                       | 56       | 21    | -14     | 10    | 40                    |
| Athens, .....               | Bradford, .....     | 768              | .....                    | 20.6                                | .....                      | 49       | 20    | -18     | 11    | 35                    |
| Butler, .....               | Butler, .....       | .....            | .....                    | 20.9                                | .....                      | 55       | 21    | -27     | 11    | 33                    |
| Carlisle, .....             | Cumberland, .....   | 480              | 52                       | 23.2                                | -6.8                       | 56       | 22    | -15     | 11    | 38                    |
| Cassandra, .....            | Cambria, .....      | 2,100            | .....                    | 23.1                                | .....                      | 55       | 21    | -16     | 10    | 40                    |
| Center Hall, .....          | Centre, .....       | 1,100            | .....                    | 21.2                                | .....                      | 54       | 22    | -19     | 10    | 31                    |
| Chambersburg, .....         | Franklin, .....     | 1,000            | 37                       | .....                               | .....                      | 53       | 21    | .....   | ..... | .....                 |
| Coatesville, .....          | Chester, .....      | 380              | 12                       | 24.4                                | -6.8                       | 59       | 22    | -13     | 10    | 43                    |
| Confluence, .....           | Somerset, .....     | 1,324            | 25                       | 22.0                                | .....                      | 62       | 22    | -23     | 11    | 37                    |
| Coopersburg, .....          | Lehigh, .....       | 520              | 10                       | 27.1                                | -4.8                       | 64       | 22    | -15     | 10    | 36                    |
| Derry Station, .....        | Westmoreland, ..... | 1,172            | .....                    | 21.6                                | .....                      | 62       | 22    | -21     | 11    | 27                    |
| Dushore, .....              | Sullivan, .....     | 1,500            | .....                    | 20.2                                | .....                      | 56       | 21    | -26     | 11    | 42                    |
| Dyberry, .....              | Wayne, .....        | 1,100            | 35                       | 18.5                                | -4.1                       | 49       | 22    | -20     | 11    | 45                    |
| Easton, .....               | Northampton, .....  | 325              | 16                       | 24.4                                | -4.3                       | 53       | 21    | -12     | 20    | 37                    |
| Emporium, .....             | Cameron, .....      | 1,050            | 12                       | 21.4                                | -5.9                       | 50       | 20    | -28     | 11    | 41                    |
| Erie, .....                 | Erie, .....         | 1,400            | 26                       | 21.0                                | -3.0                       | 52       | 20    | -12     | 10    | 27                    |
| Everett, .....              | Bedford, .....      | 1,060            | .....                    | 22.4                                | .....                      | 60       | 21    | -20     | 10    | 49                    |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 304              | 11                       | 26.3                                | -6.3                       | .....    | ..... | .....   | ..... | .....                 |
| Franklin, .....             | Venango, .....      | 955              | 24                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Gramplan, .....             | Clearfield, .....   | 1,450            | 36                       | 19.1                                | -6.6                       | 48       | 21    | -24     | 10    | 36                    |
| Greensboro, .....           | Greene, .....       | 768              | 11                       | 25.8                                | .....                      | 61       | 21    | -30     | 10    | 46                    |
| Hamburg, .....              | Berks, .....        | 380              | 9                        | 25.3                                | -4.0                       | 56       | 20    | -13     | 10    | 26                    |
| Hamlington, .....           | Wayne, .....        | 1,600            | 11                       | 20.8                                | -4.1                       | 54       | 21    | -18     | 10    | 30                    |
| Harrisburg, .....           | Dauphin, .....      | 361              | 11                       | 24.1                                | -5.9                       | 55       | 21    | -13     | 10    | 30                    |
| Hawley, .....               | Wayne, .....        | .....            | .....                    | 21.2                                | .....                      | 55       | 28    | -18     | 15    | 56                    |
| Hawthorn, .....             | Clarion, .....      | .....            | .....                    | 21.4                                | .....                      | 53       | 20    | -29     | 11    | 42                    |
| Holidaysburg, .....         | Blair, .....        | 947              | 12                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Huntingdon, .....           | Huntingdon, .....   | 650              | 12                       | 23.8                                | -6.1                       | 67       | 21    | -23     | 11    | 50                    |
| Indiana, .....              | Indiana, .....      | 1,350            | 6                        | 24.0                                | -8.2                       | 60       | 17    | -22     | 10    | 44                    |
| Irwin, .....                | Westmoreland, ..... | 884              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Johnstown, .....            | Cambria, .....      | 1,184            | 12                       | 25.4                                | -9.0                       | 62       | 21    | -17     | 10    | 45                    |

Climatological Data for Pennsylvania, February, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 25.1                                | -7.0                       | 53       | 22    | -13     | 11    | 42                    |
| Lawrenceville, .....          | Tioga, .....        | 1,000            | .....                    | 19.8                                | .....                      | 53       | 20    | -39     | 11    | 47                    |
| Lebanon, .....                | Lebanon, .....      | 1,458            | 12                       | 25.3                                | -6.9                       | 54       | 21    | -16     | 10    | 41                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 19.2                                | -4.6                       | 50       | 20    | -20     | 10    | 28                    |
| Lewisburg, .....              | Union, .....        | 460              | 28                       | 21.6                                | -5.4                       | 52       | 20    | -22     | 11    | 42                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 23.2                                | -5.7                       | 60       | 20    | -21     | 13    | 37                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 21.8                                | -7.1                       | 61       | 22    | -22     | 11    | 29                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 23.6                                | -5.5                       | 59       | 22    | -14     | 10    | 44                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 28.1                                | -5.9                       | 57       | 23    | -6      | 10    | 27                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 27.8                                | -6.4                       | 59       | 22    | -6      | 10    | 22                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 25.5                                | -7.5                       | 60       | 21    | -20     | 10    | 28                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 23.2                                | -5.9                       | 54       | 21    | -15     | 11    | 45                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 23.5                                | -7.3                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville c, .....           | Mifflin, .....      | .....            | .....                    | 18.6                                | .....                      | 52       | 25    | -16     | 11    | 28                    |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 23.0                                | .....                      | 54       | 20    | -23     | 11    | 44                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 20.3                                | -2.9                       | 55       | 20    | -24     | 10    | 44                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 22.6                                | .....                      | 52       | 21    | -15     | 10    | 40                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 22.4                                | -5.6                       | 54       | 22    | -22     | 11    | 41                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | .....                               | .....                      | .....    | ..... | -29     | 11    | .....                 |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 19.6                                | -4.3                       | 50       | 20    | -26     | 11    | 39                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 20.3                                | -7.8                       | 56       | 21    | -24     | 11    | 33                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | 25.0                                | -5.9                       | 56       | 21    | -9      | 10    | 26                    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 22.4                                | -5.5                       | 53       | 22    | -14     | 10    | 40                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 21.2                                | -6.5                       | 56       | 21    | -20     | 10    | 34                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | -22     | 10    | .....                 |
| Swarthmore a, .....           | Delaware, .....     | 190              | 11                       | 25.7                                | -8.2                       | 54       | 22    | -9      | 10    | 36                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 21.2                                | .....                      | 51       | 20    | -17     | 10    | 41                    |
| Uniontown, .....              | Fayette, .....      | 651              | 12                       | 25.6                                | -8.3                       | 64       | 20    | -22     | 10    | 37                    |
| Warren, .....                 | Warren, .....       | 1,127            | 11                       | 19.6                                | .....                      | 50       | 20    | -24     | 11    | 35                    |
| Wellaboro, .....              | Tioga, .....        | 1,327            | 21                       | 21.8                                | -4.0                       | 56       | 20    | -25     | 11    | 36                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 25.2                                | -6.4                       | 55       | 23    | -12     | 10    | 26                    |

|                     |                 |       |       |      |       |    |    |     |    |    |
|---------------------|-----------------|-------|-------|------|-------|----|----|-----|----|----|
| Westtown, .....     | Chester, .....  | 350   | 11    | 2.32 | -8.0  | 52 | 22 | -13 | 11 | 34 |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | 19.6 | ..... | 53 | 21 | -24 | 11 | 46 |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 25.2 | -4.0  | 52 | 21 | -9  | 11 | 40 |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 23.6 | -3.5  | 54 | 20 | -17 | 11 | 26 |
| York, .....         | York, .....     | 385   | 12    | 22.8 | -7.9  | 53 | 21 | -17 | 11 | 40 |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, February, 1899—Continued.

| Stations.                   | Counties.           | Precipitation, in inches. |                            |                       |                            |                    | Sky.                       |       |       | Prevailing direction of wind. | Observers.             |
|-----------------------------|---------------------|---------------------------|----------------------------|-----------------------|----------------------------|--------------------|----------------------------|-------|-------|-------------------------------|------------------------|
|                             |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (unmelted). | Number rainy days. | Number clear days.         |       |       |                               |                        |
|                             |                     |                           |                            |                       |                            |                    | Number partly cloudy days. |       |       |                               |                        |
| Altoona, .....              | Blair, .....        | 3.33                      | -0.41                      | 1.40                  | .....                      | 11                 | .....                      | ..... | ..... | NW                            | Dr. C. B. Dudley.      |
| Aqueduct, .....             | Perry, .....        | 4.36                      | +1.04                      | 0.98                  | 25.1                       | 16                 | .....                      | ..... | ..... | SW                            | Richard Callin.        |
| Athens, .....               | Bradford, .....     | 2.84                      | .....                      | 1.20                  | 20.4                       | 9                  | .....                      | ..... | ..... | NW                            | F. L. Estabrook.       |
| Butler, .....               | Butler, .....       | 2.39                      | .....                      | 0.65                  | 12.2                       | 17                 | .....                      | ..... | ..... | NW                            | Charles A. Donnel.     |
| Carlisle, .....             | Cumberland, .....   | 5.49                      | +2.33                      | 1.49                  | 30.5                       | 13                 | .....                      | ..... | ..... | NW                            | J. E. Pague.           |
| Cassandra, .....            | Cambria, .....      | 3.11                      | .....                      | 1.25                  | 14.5                       | 11                 | .....                      | ..... | ..... | NW                            | A. H. Boyle.           |
| Center Hall, .....          | Centre, .....       | 4.54                      | .....                      | 1.24                  | 27.5                       | 12                 | .....                      | ..... | ..... | .....                         | Fred. Kurts.           |
| Chambersburg, .....         | Franklin, .....     | 4.86                      | +1.97                      | 1.47                  | 31.8                       | 17                 | .....                      | ..... | ..... | W                             | J. C. Boggs.           |
| Coatesville, .....          | Chester, .....      | 10.22                     | +6.08                      | 3.53                  | 69.8                       | 16                 | .....                      | ..... | ..... | W                             | W. T. Gordon.          |
| Confluence, .....           | Somerset, .....     | 3.24                      | -0.00                      | 0.90                  | 12.0                       | 14                 | .....                      | ..... | ..... | W                             | Dr. M. Tannehill.      |
| Coopersburg, .....          | Lehigh, .....       | 5.15                      | +0.95                      | 1.12                  | .....                      | 13                 | .....                      | ..... | ..... | NW                            | Dr. M. H. Boye.        |
| Derry Station, .....        | Westmoreland, ..... | 3.74                      | .....                      | 0.91                  | 17.8                       | 14                 | .....                      | ..... | ..... | S                             | D. M. Wineman.         |
| Dushore, .....              | Sullivan, .....     | 3.48                      | .....                      | 1.05                  | 22.6                       | 12                 | .....                      | ..... | ..... | S                             | C. E. Molyneux.        |
| Dyberry, .....              | Wayne, .....        | 3.97                      | +1.11                      | 1.20                  | 22.0                       | 9                  | .....                      | ..... | ..... | NW                            | Theodore Day.          |
| Easton, .....               | Northampton, .....  | 3.41                      | +0.01                      | .....                 | 26.5                       | 10                 | .....                      | ..... | ..... | .....                         | Prof. J. W. Moore.     |
| Emporium, .....             | Cameron, .....      | 3.66                      | -0.38                      | 0.65                  | 18.3                       | 13                 | .....                      | ..... | ..... | W                             | T. B. Lloyd.           |
| Erie, .....                 | Erie, .....         | 1.44                      | -0.94                      | 0.51                  | .....                      | 15                 | .....                      | ..... | ..... | W                             | U. S. Weather Bureau.  |
| Everett, .....              | Bedford, .....      | 3.55                      | .....                      | 1.02                  | 20.5                       | 11                 | .....                      | ..... | ..... | NW                            | Ralph H. Sweetser.     |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 8.16                      | +4.17                      | .....                 | 25.5                       | 15                 | .....                      | ..... | ..... | NW                            | J. C. Hillsman.        |
| Franklin, .....             | Venango, .....      | .....                     | .....                      | .....                 | .....                      | .....              | .....                      | ..... | ..... | .....                         | Venango Water Co.      |
| Grampian, .....             | Clearfield, .....   | 3.03                      | -0.45                      | 0.68                  | 17.0                       | 7                  | .....                      | ..... | ..... | SW                            | Nathan Moore.          |
| Greensburg, .....           | Greene, .....       | 3.00                      | -0.02                      | 0.96                  | 17.4                       | 16                 | .....                      | ..... | ..... | S                             | Grant Kramer.          |
| Hamburg, .....              | Berks, .....        | 3.95                      | +1.08                      | 1.50                  | 27.5                       | 9                  | .....                      | ..... | ..... | W                             | William Shiels.        |
| Hamilton, .....             | Wayne, .....        | 6.63                      | +2.75                      | 1.40                  | 46.2                       | 15                 | .....                      | ..... | ..... | W                             | T. B. Orchard, M. D.   |
| Harrisburg, .....           | Dauphin, .....      | 3.71                      | +0.75                      | 1.01                  | .....                      | 17                 | .....                      | ..... | ..... | W                             | U. S. Weather Bureau.  |
| Hawley, .....               | Wayne, .....        | 6.03                      | .....                      | 1.20                  | 37.0                       | 11                 | .....                      | ..... | ..... | N                             | L. G. Brandhurst.      |
| Hawthorn, .....             | Clarion, .....      | 5.01                      | .....                      | 1.60                  | 12.0                       | 12                 | .....                      | ..... | ..... | W                             | C. E. Sayres, M. D.    |
| Hollidaysburg, .....        | Blair, .....        | .....                     | .....                      | .....                 | .....                      | .....              | .....                      | ..... | ..... | .....                         | Prof. J. A. Stewart.   |
| Huntingdon, .....           | Huntingdon, .....   | 3.96                      | +1.03                      | 1.64                  | 13.5                       | 12                 | .....                      | ..... | ..... | W                             | Prof. W. J. Swigart.   |
| Indiana, .....              | Indiana, .....      | .....                     | .....                      | .....                 | .....                      | .....              | .....                      | ..... | ..... | SW                            | Prof. C. B. Robertson. |
| Irwin, .....                | Westmoreland, ..... | 3.34                      | .....                      | 0.56                  | 11.7                       | 16                 | .....                      | ..... | ..... | .....                         | J. B. Gallagher.       |
| Johnstown, .....            | Cambria, .....      | 3.49                      | -0.72                      | 0.85                  | 13.5                       | 19                 | .....                      | ..... | ..... | NW                            | E. C. Lorents.         |



## MARCH, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 29.97 inches, is .07 below the normal. At the United States Weather Bureau stations the highest observed was 30.48 inches, at Philadelphia, on the 14th, and the lowest, 29.00 inches, at Philadelphia, on the 19th.

### Temperature.

The means of the daily maximum and minimum temperatures, 44.1 and 28.5 degrees respectively, give a monthly mean of 36.3 degrees, which is 0.6 degrees above the normal, and 7.7 degrees below the corresponding month of 1898.

The average daily range was 15.6 degrees.

The highest monthly mean was 40.8 degrees, at Philadelphia, Centennial avenue. (Greensboro, 43.6 degrees, is considered too high.)

The lowest monthly mean was 30.4 degrees, at Dyberry.

The highest temperature recorded during the month was 75 degrees, on the 11th, at Confluence, and 12th at Aqueduct.

The lowest temperature was 3 degrees, on the 21st, at Smethport.

The greatest local monthly range was 67 degrees, at Confluence.

The least local monthly range was 45 degrees, at Swarthmore.

The greatest daily range was 41 degrees, at Franklin.

### Precipitation.

The average precipitation for the month, 4.87 inches, is 1.44 inches more than the normal.

The largest totals of rainfall and melted snow, in inches were: Hawthorn, 10.30; Forks of Neshaminy, 7.73; Coatesville, 7.66; West Chester, 7.38; Quakertown, 7.14; Philadelphia (Centennial avenue), 7.12. The least were: Shingle House, 1.91; Lawrenceville, 2.28; Towanda, 2.55; Athens, 2.75; Leroy, 3.02; Erie, 3.08.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 14; clear, 5; partly cloudy, 9; cloudy, 17.

### Correction for February.

Westtown.—Precipitation should be 5.38.





**TOTAL PRECIP**

5"

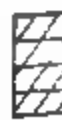
**SCALE OF SHA.**



**Under 3**



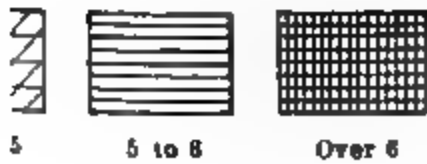
**3 to 4**



**4 to 5**

ATION, MARCH, 1899.

IN INCHES.







Climatological Data for Pennsylvania, March, 1899—Continued.

| Stations                      | Counties            | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         | Greatest daily range. |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date.                 |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 39.6                                | +2.5                       | 71       | 12    | 20      | 21                    |
| Lawrenceville, .....          | Tioga, .....        | 1,046            | .....                    | 32.6                                | .....                      | 62       | 12    | 5       | 21                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 37.6                                | +0.7                       | 70       | 12    | 18      | 21                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 31.0                                | -1.0                       | 60       | 12    | 7       | 21                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 36.1                                | +2.1                       | 69       | 12    | 16      | 21                    |
| Lock Haven, .....             | Clinton, .....      | 500              | 12                       | 37.6                                | +1.1                       | 68       | 12    | 14      | 21                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 38.0                                | -1.5                       | 70       | 12    | 8       | 7                     |
| Mauch Chunk, .....            | Carbon, .....       | 530              | 10                       | 35.6                                | -0.1                       | 69       | 12    | 13      | 21                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 23                       | 40.7                                | +0.7                       | 70       | 12    | 23      | 21                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 40.8                                | -0.4                       | 70       | 12    | 22      | 21                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 40.0                                | +1.0                       | 71       | 11    | 13      | 7                     |
| Quakertown, .....             | Bucks, .....        | 530              | 25                       | 37.2                                | +2.1                       | 67       | 12    | 18      | 21                    |
| Reading 2, .....              | Berks, .....        | 280              | 20                       | 38.0                                | -0.7                       | .....    | ..... | .....   | .....                 |
| Reedsville a, .....           | Mifflin, .....      | .....            | .....                    | 35.2                                | .....                      | 59       | 11    | 11      | 19                    |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 36.4                                | .....                      | 65       | 12    | 13      | 21                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 34.5                                | +0.5                       | 68       | 11    | 5       | 21                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 34.5                                | .....                      | 65       | 12    | 11      | 21                    |
| Sellsgrove, .....             | Snyder, .....       | 455              | 11                       | 38.2                                | +0.8                       | 71       | 12    | 16      | 21                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | .....                               | .....                      | .....    | ..... | 7       | 21                    |
| Smethport, .....              | McKean, .....       | 1,500            | 19                       | 32.2                                | -1.0                       | 67       | 11    | 3       | 21                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 35.4                                | +0.2                       | 68       | 11    | 5       | 6                     |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | 37.8                                | -0.3                       | 62       | 12    | 22      | 17                    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 33.3                                | -0.8                       | 63       | 12    | 12      | 21                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 34.4                                | .....                      | 64       | 12    | 13      | 21                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | 4       | 21                    |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 39.8                                | .....                      | 67       | 12    | 22      | 20                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 33.8                                | .....                      | 63       | 12    | 12      | 21                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 40.2                                | +0.8                       | 68       | 11    | 11      | 7                     |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 31.6                                | .....                      | 55       | 11    | 4       | 21                    |
| Wellboro, .....               | Tioga, .....        | 1,327            | 21                       | 33.4                                | +3.2                       | 60       | 12    | 10      | 21                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 38.8                                | +1.2                       | 69       | 12    | 19      | 21                    |

|                     |                 |       |       |      |       |    |    |    |    |    |
|---------------------|-----------------|-------|-------|------|-------|----|----|----|----|----|
| Westtown a, .....   | Chester, .....  | 350   | 11    | 38.0 | +1.0  | 73 | 12 | 20 | 21 | 37 |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | 32.8 | ..... | 62 | 12 | 17 | 17 | 26 |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 35.5 | +0.7  | 66 | 12 | 15 | 21 | 30 |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 36.0 | +2.3  | 65 | 12 | 16 | 21 | 21 |
| York, .....         | York, .....     | 386   | 12    | 38.9 | +0.5  | 72 | 12 | 22 | 21 | 31 |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.





|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 6.25  | +2.37 | 1.19  | 3.0   | 16    | 10    | 6     | 15    | NW    | B. P. Kirk.             |
| Lawrenceville, .....          | Tioga, .....        | 2.28  | ..... | 0.75  | 5.5   | 8     | 14    | 8     | 9     | W     | C. P. Darling.          |
| Lebanon, .....                | Lebanon, .....      | 5.21  | +1.32 | 1.08  | 6.0   | 14    | 6     | 9     | 16    | NE    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 3.02  | +0.04 | 0.55  | 8.5   | 15    | 6     | 4     | 21    | E     | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 4.36  | +0.96 | 0.77  | 6.3   | 12    | 8     | 5     | 18    | S     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 3.79  | +0.23 | 1.20  | 6.0   | 13    | 4     | 9     | 18    | W     | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 4.02  | +1.15 | 0.81  | 6.2   | 22    | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 5.75  | +1.40 | 1.08  | 9.2   | 12    | 9     | 8     | 14    | N     | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 6.47  | +3.34 | 1.07  | 4.4   | 14    | 5     | 8     | 18    | NW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 7.12  | +3.47 | 1.13  | 4.1   | 15    | 4     | 11    | 16    | NW    | John Comly.             |
| Pittsburgh, .....             | Allegheny, .....    | 3.37  | +0.45 | 0.76  | 5.2   | 16    | 2     | 9     | 20    | NW    | U. S. Weather Bureau.   |
| Quakertown, .....             | Bucks, .....        | 7.14  | +3.52 | 1.10  | 8.5   | 17    | 3     | 7     | 21    | NW    | J. L. Heacock.          |
| Reading 2, .....              | Berks, .....        | 5.67  | +2.25 | 1.18  | ..... | 15    | ..... | ..... | ..... | ..... | Franklin Yeager.        |
| Reedsville a, .....           | Mifflin, .....      | 5.57  | ..... | 1.24  | 2.0   | 8     | 9     | 8     | 14    | W     | R. K. McDonald.         |
| Renovo, .....                 | Clinton, .....      | 3.97  | ..... | 0.97  | 5.6   | 12    | 8     | 10    | 13    | ..... | Fred. C. Eyster.        |
| Saegertown, .....             | Crawford, .....     | 3.63  | +0.86 | 0.80  | 16.6  | 14    | 0     | 6     | 25    | NW    | J. G. Apple.            |
| Scranton, .....               | Lackawanna, .....   | 4.46  | ..... | 0.78  | 9.0   | 13    | 3     | 10    | 18    | W     | H. E. Palne.            |
| Selinsgrove, .....            | Snyder, .....       | 4.58  | +0.78 | 0.70  | 4.8   | 13    | 0     | 14    | 17    | W     | J. M. Boyer, C. E.      |
| Shingle House, .....          | Potter, .....       | 1.91  | ..... | 0.42  | 4.0   | 11    | 4     | 14    | 13    | W     | H. L. Pearsall.         |
| Smethport, .....              | McKean, .....       | 3.60  | -0.05 | 0.50  | 9.0   | 11    | 2     | 13    | 16    | SE    | Armstrong & Brownell.   |
| Somerset, .....               | Somerset, .....     | 5.76  | +1.83 | 1.31  | 6.7   | 12    | 0     | 13    | 18    | NW    | W. M. Schrock.          |
| South Bethlehem, .....        | Northampton, .....  | 4.06  | +0.46 | 1.04  | ..... | 6     | 11    | 8     | 12    | W     | C. W. Bachert.          |
| South Eaton, .....            | Wyoming, .....      | 3.96  | +0.74 | 0.65  | 14.0  | 14    | 6     | 10    | 14    | NW    | B. M. Hall.             |
| State College, .....          | Centre, .....       | 4.23  | +1.13 | 0.89  | 5.9   | 16    | 6     | 7     | 18    | W     | Prof. Wm. Frear.        |
| St. Marys, .....              | Elk, .....          | 3.13  | ..... | 0.52  | ..... | 12    | ..... | ..... | ..... | ..... | Wm. E. Wittmann.        |
| Swarthmore, .....             | Delaware, .....     | ..... | ..... | ..... | ..... | ..... | 2     | 14    | 15    | NW    | Prof. S. J. Cunningham. |
| Swiftwater, .....             | Monroe, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Richard Slee, M. D.     |
| Towanda, .....                | Bradford, .....     | 2.55  | ..... | 0.66  | 6.5   | 14    | 6     | 6     | 19    | E     | Hiram E. Bull, C. E.    |
| Uniontown, .....              | Fayette, .....      | 5.67  | +1.95 | 1.00  | 14.0  | 13    | 5     | 13    | 13    | NW    | Wm. Hunt.               |
| Warren, .....                 | Warren, .....       | 4.30  | ..... | 0.60  | 13.8  | 15    | 5     | 5     | 21    | SW    | James K. Simpson.       |
| Wellsboro, .....              | Tioga, .....        | 2.75  | -0.86 | 0.85  | 9.5   | 13    | 8     | 3     | 20    | S     | H. D. Deming.           |
| West Chester, .....           | Chester, .....      | 7.58  | +2.61 | 1.35  | 4.5   | 15    | 11    | 3     | 17    | NW    | J. C. Green, D. D. S.   |
| Westtown a, .....             | Chester, .....      | ..... | ..... | ..... | ..... | ..... | 10    | 10    | 10    | NW    | J. W. Hutton.           |
| White Haven, .....            | Luzerne, .....      | 4.12  | ..... | 0.85  | 9.0   | 10    | 6     | 13    | 13    | S     | C. M. Driggs.           |
| Wilkes-Barre, .....           | Luzerne, .....      | 4.49  | +0.88 | 0.90  | 7.0   | 10    | 4     | 4     | 23    | S     | A. W. Betterly, M. D.   |
| Williamsport, .....           | Lycoming, .....     | 4.36  | +1.11 | 1.17  | 4.0   | 11    | 12    | 7     | 12    | W     | G. D. Snyder, C. E.     |
| York, .....                   | York, .....         | 5.16  | +1.73 | 1.19  | 3.2   | 12    | 7     | 13    | 11    | SW    | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. ÷ 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## APRIL, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.08 inches, is .05 above the normal. At the United States Weather Bureau stations the highest observed was 30.43 inches, at Harrisburg, on the 6th, and the lowest, 29.59 inches, at Pittsburgh, on the 7th.

### Temperature.

The means of the daily maximum and minimum temperatures, 63.0 and 37.5 degrees respectively, give a monthly mean of 50.2 degrees, which is 2.2 degrees above the normal, and 4.6 degrees above the corresponding month of 1898.

The average daily range was 25.5 degrees.

The highest monthly mean was 55 degrees, at Pittsburgh.

The lowest monthly mean was 45.7 degrees, at Dushore.

The highest temperature recorded during the month was 92 degrees, on the 30th, at Derry Station.

The lowest temperature was 2 degrees, on the 3d, at Saegerstown.

The greatest local monthly range was 87 degrees, at Saegerstown.

The least local monthly range was 52 degrees, at Philadelphia.

The greatest daily range was 56 degrees, at Renovo.

### Precipitation.

The average precipitation for the month, 1.76 inches, is 1.45 inches less than the normal.

The largest totals of rainfall and melted snow, in inches were: Hawthorn, 3.25; Wellsboro, 3.07; Somerset, 2.83; Irwin, 2.81; Pittsburgh, 2.59; Emporium, 2.57. The least were: St. Marys, 0.70; Center Hall, 0.88; Philadelphia (Weather Bureau), 1.04; Franklin, 1.06; Erie, 1.08; Lock Haven, 1.10.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 6; clear, 15; partly cloudy, 9; cloudy, 6.



TOTAL PRECIP

2"

2"

SCALE OF SHA



Under 1

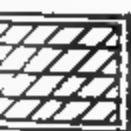


1 to 2

ATION, APRIL, 1899.

2"

ES, IN INCHES.



2 to 3



Over 3



# Climatological Data for Pennsylvania, April, 1899.

| Stations.                      | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|--------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                                |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Altoona, .....                 | Blair, .....        | 1,181            | 12                       | 50.8                                | +1.5                       | 90       | 30    | 20      | 30    | 44                    |
| Aqueduct, .....                | Perry, .....        | 367              | 11                       | 52.6                                | +0.3                       | 86       | 30    | 26      | 30    | 47                    |
| Athens, .....                  | Bradford, .....     | 768              | .....                    | 49.2                                | .....                      | 87       | 30    | 19      | 30    | 47                    |
| Butler, .....                  | Butler, .....       | .....            | .....                    | 50.6                                | .....                      | 88       | 30    | 16      | 30    | 42                    |
| Carlisle, .....                | Cumberland, .....   | 480              | 52                       | 52.6                                | +2.4                       | 84       | 31    | 23      | 31    | 42                    |
| Cassandra, .....               | Cambria, .....      | 2,100            | .....                    | 49.0                                | .....                      | 86       | 30    | 19      | 30    | 41                    |
| Center Hall, .....             | Centre, .....       | 1,100            | .....                    | 50.6                                | .....                      | 83       | 30    | 20      | 30    | 37                    |
| Chambersburg, .....            | Franklin, .....     | 1,000            | 37                       | .....                               | .....                      | 83       | 30    | .....   | ..... | .....                 |
| Coatesville, .....             | Chester, .....      | 380              | 12                       | 51.8                                | +2.0                       | 83       | 26    | 22      | 26    | 43                    |
| Confluence, .....              | Somerset, .....     | 1,324            | 25                       | 49.6                                | .....                      | 87       | 30    | 19      | 30    | 41                    |
| Coopersburg, .....             | Lehigh, .....       | 520              | 10                       | 50.4                                | +0.5                       | 77       | 30    | 24      | 30    | 37                    |
| Derry Station, .....           | Westmoreland, ..... | 1,172            | .....                    | 53.5                                | .....                      | 92       | 20    | 21      | 20    | 43                    |
| Dushore, .....                 | Sullivan, .....     | 1,590            | .....                    | 45.7                                | .....                      | 84       | 30    | 15      | 30    | 44                    |
| Dyberry, .....                 | Wayne, .....        | 1,100            | 35                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Easton, .....                  | Northampton, .....  | 325              | 16                       | 50.4                                | +1.5                       | 80       | 26    | 25      | 26    | 34                    |
| Emporium, .....                | Cameron, .....      | 1,050            | 12                       | 49.4                                | +1.1                       | 89       | 30    | 18      | 30    | 46                    |
| Erie, .....                    | Erie, .....         | 1,400            | 26                       | 47.5                                | +1.5                       | 84       | 30    | 23      | 30    | 29                    |
| Everett c. ....                | Bedford, .....      | 1,000            | .....                    | 49.0                                | .....                      | 86       | 30    | 19      | 30    | 43                    |
| Forks of Neshaminy 1, b, ..... | Bucks, .....        | 304              | 11                       | 51.0                                | -0.5                       | .....    | ..... | .....   | ..... | .....                 |
| Franklin, .....                | Venango, .....      | 955              | 24                       | 49.8                                | +6.5                       | 89       | 30    | 6       | 30    | 48                    |
| Grampian, .....                | Clearfield, .....   | 1,450            | 36                       | 49.8                                | +5.8                       | 90       | 30    | 16      | 30    | 42                    |
| Greensboro, .....              | Greene, .....       | 768              | 11                       | 53.8                                | .....                      | 90       | 30    | 20      | 30    | 45                    |
| Hamburg, .....                 | Berks, .....        | 380              | 9                        | 52.4                                | +2.2                       | 83       | 26    | 23      | 26    | 41                    |
| Hamilton, .....                | Wayne, .....        | 1,600            | 11                       | 46.8                                | +1.7                       | 81       | 30    | 19      | 30    | 45                    |
| Harrisburg, .....              | Dauphin, .....      | 1,361            | 11                       | 52.5                                | +1.5                       | 81       | 30    | 27      | 30    | 32                    |
| Hawley, .....                  | Wayne, .....        | .....            | .....                    | 46.0                                | .....                      | 82       | 30    | 14      | 30    | 47                    |
| Hawthorn, .....                | Clarion, .....      | .....            | .....                    | 51.5                                | .....                      | 89       | 30    | 16      | 30    | 51                    |
| Holidaysburg, .....            | Blair, .....        | 947              | 12                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Huntingdon, .....              | Huntingdon, .....   | 650              | 12                       | 51.6                                | +2.4                       | 91       | 30    | 19      | 30    | 46                    |
| Indiana, .....                 | Indiana, .....      | 1,350            | 6                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Irwin, .....                   | Westmoreland, ..... | 884              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Johnstown, .....               | Cambria, .....      | 1,184            | 12                       | 53.2                                | +3.2                       | 91       | 30    | 23      | 30    | 46                    |

Climatological Data for Pennsylvania, April, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 51.3                                | +2.5                       | 82       | 25    | 24      | 4     | 39                    |
| Lewrenceville, .....          | Tioga, .....        | 1,000            | .....                    | 47.2                                | .....                      | 76       | 18    | 18      | 4     | 45                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 51.4                                | +1.9                       | 82       | 30    | 21      | 6     | 44                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 48.6                                | +3.8                       | 85       | 30    | 18      | 3     | 38                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 51.0                                | +2.2                       | 83       | 30    | 22      | 4     | 43                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 53.2                                | +3.6                       | 91       | 30    | 21      | 4     | 47                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 51.9                                | +1.5                       | 85       | 30    | 19      | 3     | 34                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 49.7                                | +1.4                       | 83       | 30    | 20      | 4     | 46                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 53.3                                | +2.3                       | 80       | 26    | 28      | 3     | 30                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 53.6                                | +1.0                       | 81       | 26    | 29      | 3     | 31                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 55.0                                | +4.0                       | 80       | 30    | 25      | 3     | 32                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 49.8                                | +2.7                       | 81       | 25    | 24      | 4     | 42                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 50.2                                | -0.6                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 50.0                                | .....                      | 88       | 30    | 19      | 6     | 56                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 49.1                                | +3.3                       | 89       | 30    | 2       | 3     | 45                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 49.4                                | .....                      | 86       | 30    | 22      | 2     | 42                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 51.4                                | +1.9                       | 84       | 30    | 24      | 6     | 43                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 45.9                                | .....                      | 89       | 30    | 17      | 3     | 46                    |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 47.1                                | +2.8                       | 86       | 30    | 14      | 4     | 50                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 48.0                                | +1.4                       | 82       | 30    | 12      | 3     | 40                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | 48.5                                | +3.0                       | 74       | 14    | 28      | 2     | 34                    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 49.3                                | +2.6                       | 83       | 30    | 21      | 3     | 43                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 50.9                                | +3.1                       | 84       | 30    | 21      | 3     | 36                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | 12      | 3     | .....                 |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 52.5                                | .....                      | 89       | 26    | 28      | 2     | 34                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 48.8                                | .....                      | 86       | 30    | 19      | 6     | 46                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 52.8                                | +1.7                       | 16       | 30    | 25      | 1     | 38                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 47.8                                | .....                      | 89       | 30    | 18      | 3     | 54                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 47.6                                | +1.1                       | 85       | 30    | 18      | 4     | 42                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 51.8                                | +2.7                       | 80       | 25    | 25      | 3     | 33                    |



|                     |                 |       |       |       |       |       |       |       |       |       |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Westtown, .....     | Chester, .....  | 350   | 11    | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | ..... | 46.2  | ..... | 90    | 30    | 13    | 11    |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | ..... | 50.6  | +1.7  | 87    | 30    | 23    | 6     |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | ..... | 50.4  | +4.2  | 82    | 30    | 24    | 4     |
| York, .....         | York, .....     | 335   | 12    | ..... | 51.4  | +0.9  | 84    | 30    | 22    | 4     |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 8 p. m. + 2. Mean of 8 a. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2. The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers. A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing. All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, April, 1899—Continued.

| Stations.                      | Counties.           | Precipitation, in inches. |                            |                       |                             |                    | Sky.                       |       |       | Prevailing direction of wind. | Observers.             |
|--------------------------------|---------------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|----------------------------|-------|-------|-------------------------------|------------------------|
|                                |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days.         |       |       |                               |                        |
|                                |                     |                           |                            |                       |                             |                    | Number partly cloudy days. |       |       |                               |                        |
| Altoona, .....                 | Blair, .....        | 1.64                      | -1.28                      | 1.36                  | .....                       | 4                  | .....                      | ..... | 7     | SE                            | Dr. C. B. Dudley.      |
| Aqueduct, .....                | Perry, .....        | 1.14                      | -1.92                      | 0.59                  | T                           | 3                  | .....                      | 11    | 12    | SW                            | Richard Callin.        |
| Athens, .....                  | Bradford, .....     | 1.41                      | .....                      | 0.52                  | T                           | 8                  | .....                      | 19    | 7     | NW                            | F. L. Estabrook.       |
| Butler, .....                  | Butler, .....       | 1.36                      | .....                      | 0.72                  | T                           | 11                 | .....                      | 10    | 8     | SW                            | Charles A. Donnel.     |
| Carlisle, .....                | Cumberland, .....   | 1.14                      | -2.13                      | 0.92                  | .....                       | 2                  | .....                      | 22    | 6     | SW                            | J. E. Pague.           |
| Cassandra, .....               | Cambria, .....      | 1.93                      | .....                      | 1.18                  | 7.5                         | 6                  | .....                      | 7     | 17    | SW                            | A. H. Boyle.           |
| Center Hall, .....             | Centre, .....       | 0.88                      | .....                      | 0.77                  | 1.0                         | 3                  | .....                      | 17    | 2     | .....                         | Fred. Kurtz.           |
| Chambersburg, .....            | Franklin, .....     | 1.23                      | -1.21                      | 0.96                  | .....                       | 3                  | .....                      | 11    | 11    | W                             | J. C. Boggs.           |
| Coatesville, .....             | Chester, .....      | 1.89                      | -1.63                      | 0.96                  | .....                       | 4                  | .....                      | 17    | 11    | W                             | W. T. Gordon.          |
| Confluence, .....              | Somerset, .....     | 2.41                      | -1.64                      | 0.92                  | .....                       | 12                 | .....                      | 15    | 2     | W                             | Dr. M. Tannehill.      |
| Coopersburg, .....             | Lehigh, .....       | 1.85                      | -1.86                      | 0.71                  | .....                       | 4                  | .....                      | 20    | 7     | NW                            | Dr. H. M. Boye.        |
| Derry Station, .....           | Westmoreland, ..... | 2.55                      | .....                      | 0.69                  | T                           | 9                  | .....                      | 16    | 8     | S                             | D. M. Wineman.         |
| Dushore, .....                 | Sullivan, .....     | 1.82                      | .....                      | 0.83                  | 2.0                         | 6                  | .....                      | 17    | 5     | W                             | C. E. Molyneux.        |
| Dyberry, .....                 | Wayne, .....        | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Theodore Day.          |
| Easton, .....                  | Northampton, .....  | 1.92                      | -1.15                      | 1.02                  | 0.5                         | 7                  | .....                      | 19    | 4     | .....                         | Prof. J. W. Moore.     |
| Emporium, .....                | Cameron, .....      | 2.67                      | -0.43                      | 1.15                  | T                           | 7                  | .....                      | 13    | 13    | W                             | T. B. Lloyd.           |
| Erle, .....                    | Erle, .....         | 1.08                      | -0.66                      | 0.35                  | .....                       | 11                 | .....                      | 12    | 10    | W                             | U. S. Weather Bureau.  |
| Everett c, .....               | Bedford, .....      | 1.87                      | .....                      | 1.20                  | .....                       | 3                  | .....                      | 16    | 12    | SW                            | Ralph H. Sweetser.     |
| Forks of Neshaminy 1, b, ..... | Bucks, .....        | 1.72                      | -1.76                      | 0.65                  | .....                       | 3                  | .....                      | 18    | 7     | N                             | J. C. Hillsman.        |
| Franklin, .....                | Venango, .....      | 1.06                      | -1.44                      | 0.96                  | T                           | 2                  | .....                      | 15    | 10    | W                             | Venango Water Co.      |
| Grampian, .....                | Clearfield, .....   | 1.67                      | -1.72                      | 0.74                  | 3.0                         | 8                  | .....                      | 9     | 13    | SW                            | Nathan Moore.          |
| Greensburg, .....              | Greene, .....       | 1.14                      | -2.28                      | 0.58                  | T                           | 7                  | .....                      | 17    | 4     | S                             | Grant Kramer.          |
| Hamburg, .....                 | Berks, .....        | 2.27                      | -1.37                      | 1.65                  | .....                       | 4                  | .....                      | 0     | 17    | W                             | Jacob Wunch.           |
| Hamilton, .....                | Wayne, .....        | 2.17                      | -1.20                      | 0.59                  | 2.5                         | 8                  | .....                      | 3     | 12    | W                             | T. B. Orchard, M. D.   |
| Harrisburg, .....              | Dauphin, .....      | 1.15                      | -1.28                      | 0.78                  | .....                       | 4                  | .....                      | 12    | 11    | W                             | U. S. Weather Bureau.  |
| Hawley, .....                  | Wayne, .....        | 1.67                      | .....                      | 0.71                  | T                           | 5                  | .....                      | 12    | 14    | W                             | L. G. Brandhurst.      |
| Hawthorn, .....                | Clarion, .....      | 3.25                      | .....                      | 2.10                  | T                           | 4                  | .....                      | 10    | 18    | E                             | C. E. Sayres, M. D.    |
| Hollidaysburg, .....           | Blair, .....        | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Prof. J. A. Stewart.   |
| Huntingdon, .....              | Huntingdon, .....   | 1.32                      | -1.76                      | 1.01                  | 0.5                         | 6                  | .....                      | 13    | 14    | W                             | Prof. W. J. Swigart.   |
| Indiana, .....                 | Indiana, .....      | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Prof. C. B. Robertson. |
| Irwin, .....                   | Westmoreland, ..... | 2.81                      | .....                      | 1.60                  | T                           | 6                  | .....                      | 16    | 5     | .....                         | J. B. Gallagher.       |
| Johnstown, .....               | Cambria, .....      | 2.27                      | -2.57                      | 1.51                  | 1.0                         | 10                 | .....                      | 9     | 12    | S                             | E. C. Lorentz.         |

|                         |               |       |       |       |       |       |       |       |       |       |                         |
|-------------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square.         | Chester.      | 2.23  | -1.26 | 1.19  | ..... | 4     | 19    | 6     | 5     | NW    | B. P. Kirk.             |
| Lawrenceville.          | Tloga.        | 2.10  | ..... | 0.70  | T     | 8     | 21    | 5     | 4     | W     | C. P. Darling.          |
| Lebanon.                | Lebanon.      | 1.51  | -1.94 | 0.88  | ..... | 4     | 14    | 14    | 2     | SW    | G. W. Hayes, C. E.      |
| Le Roy.                 | Bradford.     | 2.15  | -1.55 | 0.90  | 0.7   | 8     | 15    | 6     | 9     | SW    | G. W. T. Warburton.     |
| Lewisburg.              | Union.        | 1.89  | -1.64 | 1.26  | ..... | 4     | 20    | 2     | 8     | S     | Prof. W. G. Owen.       |
| Lock Haven.             | Clinton.      | 1.10  | -1.91 | 0.76  | T     | 5     | 16    | 10    | 4     | W     | Prof. J. A. Robb.       |
| Lycippus.               | Westmoreland. | 2.63  | -1.77 | 0.80  | 0.2   | 7     | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk.            | Carbon.       | 2.35  | -0.85 | 1.70  | T     | 3     | 23    | 3     | 4     | N     | F. C. Wintermute.       |
| Philadelphia.           | Philadelphia. | 1.64  | -2.38 | 0.44  | ..... | 3     | 13    | 9     | 8     | NW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue. | Philadelphia. | 1.43  | -1.99 | 0.63  | T     | 3     | 16    | 10    | 4     | NW    | John Comly.             |
| Pittsburgh.             | Allegheny.    | 2.59  | -0.24 | 1.10  | ..... | 10    | 10    | 14    | 6     | NW    | U. S. Weather Bureau.   |
| Quakertown.             | Bucks.        | 2.05  | -0.96 | 1.24  | T     | 4     | 12    | 14    | 4     | NW    | J. L. Heacock.          |
| Reading 2.              | Berks.        | 1.40  | -1.78 | 0.80  | T     | 3     | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedsville.             | Mifflin.      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. K. McDonald.         |
| Renovo.                 | Clinton.      | 2.08  | ..... | 1.46  | ..... | 4     | 19    | 8     | 3     | ..... | Fred. C. Eyster.        |
| Saegerstown.            | Crawford.     | 1.24  | -1.14 | 0.50  | 2.5   | 7     | 4     | 16    | 10    | NW    | J. G. Apple.            |
| Scranton.               | Lackawanna.   | 1.96  | ..... | 0.63  | ..... | 5     | 15    | 6     | 9     | W     | H. E. Payne.            |
| Selinsgrove.            | Snyder.       | 1.37  | -1.63 | 0.49  | ..... | 5     | 0     | 28    | 5     | SE    | J. M. Boyer, C. E.      |
| Shingle House.          | Potter.       | 1.74  | ..... | 0.46  | 1.0   | 7     | 13    | 16    | 1     | W     | Dr. W. H. Tassell.      |
| Smethport.              | McKean.       | 1.40  | -1.76 | 0.50  | ..... | 7     | 10    | 10    | 10    | W     | Armstrong & Brownell.   |
| Somerset.               | Somerset.     | 2.83  | -1.41 | 0.85  | ..... | 8     | 6     | 15    | 9     | SW    | W. M. Schrock.          |
| South Bethlehem.        | Northampton.  | 1.70  | -1.03 | 0.85  | ..... | 2     | 19    | 5     | 6     | W     | C. W. Bachert.          |
| South Eaton.            | Wyoming.      | 2.30  | -0.22 | 0.86  | T     | 6     | 18    | 7     | 6     | NW    | B. M. Hall.             |
| State College.          | Centre.       | 1.71  | -1.24 | 0.85  | 0.4   | 7     | 16    | 11    | 3     | S     | Prof. Wm. Frear.        |
| St. Marys.              | Elk.          | 0.70  | ..... | 0.32  | ..... | 6     | 19    | 9     | 2     | ..... | Wm. E. Wittman.         |
| Swarthmore.             | Delaware.     | 1.00  | ..... | 0.90  | ..... | 2     | 3     | 19    | 3     | NW    | Prof. S. J. Cunningham. |
| Swiftwater.             | Monroe.       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Richard Slee, M. D.     |
| Towanda.                | Bradford.     | 1.84  | ..... | 0.54  | 0.5   | 8     | 17    | 6     | 7     | UW    | Hiram E. Bull, C. E.    |
| Uniontown.              | Fayette.      | 1.37  | -2.31 | 0.62  | T     | 8     | 16    | 10    | 5     | SW    | Wm. Hunt.               |
| Warren.                 | Warren.       | 1.64  | -1.65 | 0.65  | 3.1   | 9     | 19    | 5     | 6     | SW    | James K. Simpson.       |
| Wellsboro.              | Tloga.        | 3.67  | -0.61 | 1.80  | T     | 5     | 15    | 5     | 10    | S     | H. D. Deming.           |
| West Chester.           | Chester.      | 2.02  | -1.99 | 1.14  | ..... | 5     | 21    | 5     | 4     | W     | J. C. Green, D. D. S.   |
| Westtown.               | Chester.      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | J. W. Hutton.           |
| White Haven.            | Luzerne.      | 1.28  | ..... | 0.68  | T     | 3     | 22    | 6     | 2     | N     | Geo. R. Rodgers.        |
| Wilkes-Barre.           | Luzerne.      | 1.37  | -1.09 | 0.48  | ..... | 4     | 18    | 3     | 9     | N     | A. W. Betterly, M. D.   |
| Williamsport.           | Lycoming.     | 1.71  | -1.05 | 0.92  | T     | 5     | 16    | 10    | 4     | W     | G. D. Snyder, C. E.     |
| York.                   | York.         | 1.28  | -1.53 | 0.72  | 0.4   | 5     | 19    | 10    | 1     | W     | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n," denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## MAY, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.06 inches, is .06 above the normal. At the United States Weather Bureau stations the highest observed was 30.35 inches, at Erie, on the 14th, and Philadelphia, on the 25th, and the lowest, 29.68 inches, at Philadelphia and Pittsburgh, on the 8th.

### Temperature.

The means of the daily maximum and minimum temperatures, 73.1 and 49.1 degrees respectively, give a monthly mean of 61.1 degrees, which is 1.6 degrees above the normal, and 1.1 degrees above the corresponding month of 1898.

The average daily range was 24 degrees.

The highest monthly mean was 65.8 degrees, at Aqueduct.

The lowest monthly mean was 56.6 degrees, at Warren.

The highest temperature recorded during the month was 100 degrees, on the 1st, at Derry Station.

The lowest temperature was 24 degrees, on the 4th, at White Haven.

The greatest local monthly range was 41 degrees, at Erie.

The greatest daily range was 51 degrees, at Shingle House.

### Precipitation.

The average precipitation for the month, 3.82 inches, is 0.86 less than the normal.

The largest totals of rainfall, in inches, were: Warren, 6.40; Carlisle, 6.36; Johnstown, 6.20; Hawthorn, 6.17; Chambersburg, 5.99; Saegerstown, 5.95. The least were: Lansdale, 1.15; Swiftwater, 1.48; Point Pleasant, 1.55; Bethlehem, 1.76; Le Roy, 2.07; Wilkes-Barre, 2.07.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 11; clear, 10; partly cloudy, 11; cloudy, 10.



TOTAL PRECI

6

4

4

5"

5"

5"

SCALE OF SH



Under 2



2 to 4



4

TATION, MAY, 1899.

3"

3"

FS. IN INCHES.



0 to 5



5 to 6



Over 6





Climatological Data for Pennsylvania, May, 1899.

| Stations.                   | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-----------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                             |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Altoona, .....              | Blair, .....        | 1,181            | 12                       | 60.8                                | +1.2                       | 93       | 1     | 37      | 22    | 40                    |
| Aqueduct, .....             | Perry, .....        | 367              | 11                       | 65.8                                | +2.4                       | 96       | 28    | 42      | 22    | 38                    |
| Athens, .....               | Bradford, .....     | 768              | .....                    | 59.0                                | .....                      | 90       | 1     | 31      | 10    | 47                    |
| Butler, .....               | Butler, .....       | .....            | .....                    | 60.2                                | .....                      | 85       | 1     | 34      | 22    | 41                    |
| Carlisle, .....             | Cumberland, .....   | 480              | 52                       | 63.4                                | +2.2                       | 87       | 28    | 40      | 17    | 30                    |
| Cassandra, .....            | Cambria, .....      | 2,100            | .....                    | 59.5                                | .....                      | 85       | 1     | 35      | 22    | 36                    |
| Center Hall, .....          | Centre, .....       | 1,100            | .....                    | 60.2                                | .....                      | 92       | 1     | 38      | 22    | 36                    |
| Chambersburg, .....         | Franklin, .....     | 1,600            | 37                       | .....                               | .....                      | 88       | 28    | .....   | ..... | .....                 |
| Coatesville, .....          | Chester, .....      | 380              | 12                       | 62.6                                | +1.7                       | 92       | 28    | 37      | 4     | 39                    |
| Confluence, .....           | Somerset, .....     | 1,324            | 25                       | 61.4                                | .....                      | 91       | 1     | 35      | 22    | 41                    |
| Coopersburg, .....          | Lehigh, .....       | 520              | 10                       | 60.6                                | +0.3                       | 86       | 2     | 41      | 4     | 35                    |
| Derry Station, .....        | Westmoreland, ..... | 1,172            | .....                    | 65.4                                | .....                      | 100      | 1     | 37      | 22    | 43                    |
| Dushore, .....              | Sullivan, .....     | 1,590            | .....                    | 57.2                                | .....                      | 88       | 28    | 28      | 10    | 45                    |
| Dyberry, .....              | Wayne, .....        | 1,100            | 35                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Easton, .....               | Northampton, .....  | 325              | 16                       | 62.2                                | +1.7                       | 86       | 28    | 41      | 4     | 35                    |
| Emporium, .....             | Cameron, .....      | 1,050            | 12                       | 59.6                                | -1.2                       | 89       | 1     | 35      | 40    | 10                    |
| Erie, .....                 | Erie, .....         | 1,400            | 26                       | 57.0                                | .....                      | 82       | 29    | 41      | 14    | 33                    |
| Everett, .....              | Bedford, .....      | 1,060            | .....                    | 61.4                                | .....                      | 88       | 1     | 30      | 15    | 42                    |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 304              | 11                       | 62.0                                | +0.9                       | .....    | ..... | .....   | ..... | .....                 |
| Franklin, .....             | Venango, .....      | 955              | 24                       | 60.4                                | .....                      | 86       | 29    | 35      | 14    | 43                    |
| Grampian, .....             | Clearfield, .....   | 1,450            | 36                       | 60.2                                | +3.1                       | 84       | 29    | 38      | 22    | 30                    |
| Greensboro, .....           | Greene, .....       | 768              | 11                       | 64.4                                | .....                      | 88       | 29    | 38      | 15    | 42                    |
| Hamburg, .....              | Berks, .....        | 380              | 9                        | 62.8                                | +1.0                       | 90       | 2     | 40      | 4     | 39                    |
| Hamlington, .....           | Wayne, .....        | 1,600            | 11                       | 58.6                                | +1.1                       | 86       | 1     | 35      | 16    | 34                    |
| Harrisburg, .....           | Dauphin, .....      | 361              | 11                       | 63.0                                | +1.0                       | 87       | 28    | 47      | 4     | 28                    |
| Hawley, .....               | Wayne, .....        | .....            | .....                    | 60.5                                | .....                      | 92       | 1     | 33      | 10    | 44                    |
| Hawthorn, .....             | Clarion, .....      | .....            | .....                    | 60.8                                | .....                      | 86       | 1     | 35      | 11    | 43                    |
| Hollidaysburg, .....        | Blair, .....        | 947              | 12                       | 62.1                                | +1.9                       | 95       | 1     | 37      | 10    | 45                    |
| Huntingdon a, .....         | Huntingdon, .....   | 650              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Indiana, .....              | Indiana, .....      | 1,350            | 6                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Irwin, .....                | Westmoreland, ..... | 884              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Johnstown, .....            | Cambria, .....      | 1,184            | 12                       | 63.5                                | +3.9                       | 92       | 1     | 39      | 22    | 42                    |

Climatological Data for Pennsylvania, May, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. |                       |
|                               |                     |                  |                          |                                     |                            |          |       |         |       | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 62.0                                | +1.3                       | 90       | 28    | 37      | 4     | 34                    |
| Lawrenceville c, .....        | Tioga, .....        | 1,000            | .....                    | 56.4                                | .....                      | 80       | 29    | 30      | 10    | 35                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 61.5                                | +1.4                       | 88       | 28    | 40      | 22    | 36                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 58.7                                | +1.5                       | 89       | 1     | 38      | 16    | 32                    |
| Lewisburg, .....              | Union, .....        | 460              | 28                       | 60.8                                | +1.7                       | 89       | 28    | 34      | 10    | 40                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 63.6                                | +2.2                       | 96       | 1     | 39      | 10    | 41                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 64.5                                | +4.0                       | 89       | 1     | 38      | 21    | .....                 |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 61.6                                | +1.7                       | 90       | 28    | 40      | 6     | 39                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 27                       | 63.3                                | +1.3                       | 89       | 28    | 45      | 4     | 27                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 64.0                                | +0.9                       | 90       | 28    | 45      | 4     | 30                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 65.0                                | +2.0                       | 86       | 18    | 43      | 21    | 32                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 60.5                                | +1.1                       | 88       | 28    | 37      | 4     | 37                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 61.6                                | +0.2                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 62.0                                | .....                      | 90       | 1     | 38      | 10    | 39                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 59.4                                | +2.6                       | 86       | 1     | 32      | 22    | 44                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 61.0                                | .....                      | 90       | 1     | 37      | 10    | 39                    |
| Sellsgrove, .....             | Snyder, .....       | 455              | 11                       | 62.0                                | +0.8                       | 90       | 1     | 37      | 11    | 39                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 59.7                                | .....                      | 92       | 1     | 28      | 9     | 51                    |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 57.0                                | +1.2                       | 85       | 1     | 30      | 10    | 43                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 59.0                                | +2.1                       | 86       | 3     | 30      | 22    | 48                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | 64.6                                | +1.4                       | 88       | 28    | 40      | 5     | 39                    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 59.9                                | +1.9                       | 87       | 1     | 37      | 10    | 35                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 60.7                                | +1.6                       | 87       | 1     | 40      | 22    | 30                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | 33      | 22    | .....                 |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 63.0                                | +1.9                       | 88       | 28    | 42      | 8     | 32                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 56.8                                | .....                      | 82       | 1     | 35      | 5     | 33                    |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 59.2                                | .....                      | 88       | 1     | 32      | 10    | 42                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 62.6                                | +1.0                       | 89       | 29    | 36      | 22    | 37                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 56.6                                | .....                      | 81       | 29    | 33      | 10    | 43                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 58.2                                | +1.2                       | 90       | 1     | 30      | 10    | 42                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 62.1                                | +1.8                       | 88       | 28    | 42      | 4     | 29                    |

|                     |                 |       |       |      |       |    |    |    |    |    |
|---------------------|-----------------|-------|-------|------|-------|----|----|----|----|----|
| Westtown, .....     | Chester, .....  | 350   | 11    | 60.8 | ..... | 87 | 28 | 37 | 4  | 36 |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | 57.1 | ..... | 98 | 30 | 24 | 3  | 44 |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 63.0 | +2.5  | 94 | 28 | 39 | 11 | 43 |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 62.0 | +2.0  | 86 | 28 | 40 | 10 | 24 |
| York, .....         | York, .....     | 485   | 12    | 62.3 | +1.1  | 89 | 28 | 37 | 22 | 36 |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n," denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, May, 1899—Continued.

| Stations.             | Counties.     | Precipitation, in inches. |                            |                       |                             |                    | Sky.               |                            |                     | Prevailing direction of wind. | Observers.             |
|-----------------------|---------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------------|----------------------------|---------------------|-------------------------------|------------------------|
|                       |               | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days. | Number partly cloudy days. | Number cloudy days. |                               |                        |
| Altoona.              | Blair.        | 5.62                      | +1.25                      | 2.27                  | .....                       | 13                 | .....              | .....                      | .....               | SE                            | Dr. C. B. Dudley.      |
| Aqueduct.             | Perry.        | 3.65                      | ..2.27                     | 0.77                  | .....                       | 10                 | 5                  | 11                         | 15                  | SE                            | Richard Callin.        |
| Athens.               | Bradford.     | 3.15                      | .....                      | 1.06                  | .....                       | 13                 | 14                 | 10                         | 7                   | SW                            | F. L. Estabrook.       |
| Butler.               | Butler.       | 4.39                      | .....                      | 1.21                  | .....                       | 12                 | 6                  | 10                         | 15                  | NW                            | Charles A. Donnel.     |
| Carlisle.             | Cumberland.   | 6.36                      | +2.23                      | 1.56                  | .....                       | 12                 | 13                 | 14                         | 4                   | S                             | J. E. Pague.           |
| Cassandra.            | Cambria.      | 4.75                      | .....                      | 1.12                  | .....                       | 12                 | 1                  | 21                         | 9                   | NW                            | A. H. Boyle.           |
| Center Hall.          | Centre.       | 5.66                      | .....                      | 1.49                  | .....                       | 7                  | 6                  | 15                         | 10                  | .....                         | Fred. Kurtz.           |
| Chambersburg.         | Franklin.     | 5.99                      | +0.81                      | 1.26                  | .....                       | 14                 | 6                  | 6                          | 19                  | W                             | J. C. Boggs.           |
| Coatesville.          | Chester.      | 2.77                      | -2.64                      | 0.63                  | .....                       | 11                 | 12                 | 15                         | 4                   | S                             | W. T. Gordon.          |
| Confluence.           | Somerset.     | 5.71                      | -1.68                      | 2.50                  | .....                       | 12                 | 15                 | 1                          | 15                  | W                             | Dr. M. Tannehill.      |
| Coopersburg.          | Lehigh.       | 3.14                      | -3.36                      | 0.80                  | .....                       | 10                 | 15                 | 8                          | 8                   | NW                            | Dr. M. H. Boye.        |
| Derry Station.        | Westmoreland. | 3.57                      | .....                      | 1.05                  | .....                       | 13                 | 13                 | 8                          | 10                  | W                             | D. M. Wineman.         |
| Dushore.              | Sullivan.     | 2.20                      | .....                      | 0.60                  | .....                       | 9                  | 12                 | 10                         | 9                   | N                             | C. E. Molyneux.        |
| Dyberry.              | Wayne.        | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | Theodore Day.          |
| Easton.               | Northampton.  | 2.51                      | -2.18                      | 1.03                  | .....                       | 7                  | 14                 | 7                          | 10                  | .....                         | Prof. J. W. Moore.     |
| Emporium.             | Cameron.      | 3.92                      | -1.49                      | 1.21                  | .....                       | 11                 | 10                 | 16                         | 5                   | W                             | T. B. Lloyd.           |
| Erle.                 | Erle.         | 5.35                      | +0.81                      | 1.48                  | .....                       | 12                 | 8                  | 9                          | 14                  | SW                            | U. S. Weather Bureau.  |
| Everett.              | Bedford.      | 4.39                      | .....                      | 1.60                  | .....                       | 12                 | 12                 | 14                         | 6                   | W                             | Ralph H. Sweetser.     |
| Forks of Neshaminy 1. | Bucks.        | 2.85                      | -3.51                      | 0.83                  | .....                       | 13                 | 9                  | 10                         | 12                  | S                             | J. C. Hilsman.         |
| Franklin.             | Venango.      | 5.28                      | +2.30                      | 1.47                  | .....                       | 10                 | 8                  | 11                         | 12                  | W                             | Venango Water Co.      |
| Gramplan.             | Clearfield.   | 5.34                      | +1.03                      | 1.40                  | .....                       | 12                 | 0                  | 21                         | 10                  | W                             | Nathan Moore.          |
| Greensboro.           | Greene.       | 6.16                      | +0.46                      | 1.50                  | .....                       | 15                 | 9                  | 10                         | 12                  | S                             | Grant Kramer.          |
| Hamburg.              | Berks.        | 4.83                      | -1.18                      | 1.05                  | .....                       | 13                 | 0                  | 10                         | 21                  | W                             | Jacob Wunch.           |
| Hamilton.             | Wayne.        | 2.76                      | -1.80                      | 0.65                  | .....                       | 12                 | 5                  | 8                          | 18                  | W                             | T. B. Orchard, M. D.   |
| Harrisburg.           | Dauphin.      | 4.49                      | -0.43                      | 1.05                  | .....                       | 12                 | 7                  | 10                         | 14                  | SW                            | U. S. Weather Bureau.  |
| Hawley.               | Wayne.        | 3.42                      | .....                      | 1.16                  | .....                       | 8                  | 7                  | 13                         | 11                  | E                             | L. G. Brandhurst.      |
| Hawthorn.             | Clarton.      | 6.17                      | .....                      | 2.35                  | .....                       | 13                 | 6                  | 18                         | 7                   | E                             | C. E. Sayres, M. D.    |
| Holidaysburg.         | Blair.        | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | Prof. J. A. Stewart.   |
| Huntingdon a.         | Huntingdon.   | 4.46                      | ..1.29                     | 1.00                  | .....                       | 12                 | 11                 | 11                         | 8                   | W                             | Prof. W. J. Swigart.   |
| Indiana.              | Indiana.      | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | Prof. C. B. Robertson. |
| Irwin.                | Westmoreland. | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | J. B. Gallagher.       |
| Johnstown.            | Cambria.      | 6.20                      | +1.50                      | 2.34                  | .....                       | 16                 | 7                  | 11                         | 13                  | W                             | E. C. Lorentz.         |

|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 2.74  | -2.54 | 0.73  | ..... | 9     | 10    | 16    | 5     | E     | B. P. Kirk.             |
| Lawrenceville c, .....        | Tioga, .....        | 2.31  | ..... | 0.75  | ..... | 10    | 20    | 4     | 7     | W     | C. F. Darling.          |
| Lebanon, .....                | Lebanon, .....      | 4.53  | -1.63 | 0.92  | ..... | 11    | 11    | 14    | 6     | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 2.07  | -2.73 | 0.50  | ..... | 12    | 5     | 13    | 13    | SW    | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 4.32  | -0.21 | 1.16  | ..... | 10    | 8     | 11    | 12    | S     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 3.67  | -0.46 | 0.95  | ..... | 9     | 4     | 13    | 9     | W     | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 5.01  | +1.07 | 2.02  | ..... | 14    | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 2.66  | -3.38 | 0.84  | ..... | 10    | 15    | 5     | 11    | S     | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 2.30  | -0.99 | 0.79  | ..... | 11    | 8     | 11    | 12    | SW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 2.30  | -2.34 | 0.77  | ..... | 11    | 11    | 13    | 7     | SW    | John Comly.             |
| Pittsburgh, .....             | Allegheny, .....    | 3.26  | -0.17 | 1.34  | ..... | 11    | 9     | 13    | 9     | SW    | U. S. Weather Bureau.   |
| Quakertown, .....             | Bucks, .....        | 3.04  | -1.52 | 0.75  | ..... | 11    | 3     | 15    | 13    | SW    | J. L. Heacock.          |
| Reading 2, .....              | Berks, .....        | 2.74  | -3.10 | 0.54  | ..... | 13    | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedsville, .....             | Mifflin, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. K. McDonald.         |
| Renovo, .....                 | Clinton, .....      | 3.43  | ..... | 0.94  | ..... | 9     | 7     | 19    | 5     | ..... | Fred. C. Eyster.        |
| Saegertown, .....             | Crawford, .....     | 5.95  | +0.81 | 1.24  | ..... | 13    | 3     | 13    | 15    | NW    | J. G. Apple.            |
| Scranton, .....               | Lackawanna, .....   | 2.73  | ..... | 0.88  | ..... | 10    | 15    | 8     | 8     | W     | H. E. Paine.            |
| Selinsgrove, .....            | Snyder, .....       | 4.45  | -0.84 | 1.13  | ..... | 11    | 19    | 2     | 10    | SE    | J. M. Boyer, C. E.      |
| Shingle House, .....          | Potter, .....       | ..... | ..... | ..... | ..... | 11    | 13    | 13    | 5     | W     | Dr. W. H. Tassell.      |
| Smethport, .....              | McKean, .....       | 5.33  | -0.15 | 0.75  | ..... | 10    | 3     | 14    | 14    | NW    | Armstrong & Brownell.   |
| Somerset, .....               | Somerset, .....     | 4.96  | -1.18 | 2.15  | ..... | 9     | 6     | 18    | 8     | SW    | W. M. Schrock.          |
| South Bethlehem, .....        | Northampton, .....  | 1.76  | -2.54 | 0.73  | ..... | 4     | 15    | 9     | 7     | W     | C. W. Bachert.          |
| South Eaton, .....            | Wyoming, .....      | 2.24  | -2.39 | 0.73  | ..... | 7     | 14    | 9     | 8     | NW    | B. M. Hall.             |
| State College, .....          | Centre, .....       | 4.77  | +0.26 | 0.98  | ..... | 12    | 15    | 10    | 6     | S     | Prof. Wm. Frear.        |
| St. Marys, .....              | Elk, .....          | 4.77  | ..... | 1.05  | ..... | 12    | 6     | 18    | 7     | ..... | Wm. E. Whittman.        |
| Swarthmore, .....             | Delaware, .....     | 3.30  | -1.63 | 0.90  | ..... | 6     | 1     | 23    | 7     | SW    | Prof. S. J. Cunningham. |
| Swiftwater, .....             | Monroe, .....       | 1.48  | ..... | 0.65  | ..... | 5     | 13    | 12    | 7     | W     | Richard Slee, M. D.     |
| Towanda, .....                | Bradford, .....     | 2.10  | ..... | 0.50  | ..... | 11    | 9     | 14    | 8     | NW    | Hiram E. Bull, C. E.    |
| Unlontown, .....              | Fayette, .....      | 5.09  | +0.07 | 1.97  | ..... | 12    | 10    | 16    | 5     | NW    | Wm. Hunt.               |
| Warren, .....                 | Warren, .....       | 6.40  | +1.14 | 1.20  | ..... | 15    | 11    | 7     | 13    | SW    | James K. Simpson.       |
| Wellsboro, .....              | Tioga, .....        | 2.15  | -3.10 | 1.00  | ..... | 7     | 15    | 3     | 13    | N     | H. D. Deming.           |
| West Chester, .....           | Chester, .....      | 2.60  | -1.17 | 0.93  | ..... | 12    | 15    | 7     | 9     | S     | J. C. Green, D. D. S.   |
| Westtown, .....               | Chester, .....      | ..... | ..... | ..... | ..... | ..... | 17    | 9     | 5     | W     | J. W. Hutton.           |
| White Haven, .....            | Luzerne, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 10    | N     | Geo. R. Rodgers.        |
| Wilkes-Barre, .....           | Luzerne, .....      | 2.07  | -2.88 | 0.52  | ..... | 7     | 8     | 9     | 14    | N     | A. W. Betterly, M. D.   |
| Williamsport, .....           | Lycoming, .....     | 2.36  | +0.07 | 0.83  | ..... | 9     | 10    | 16    | 5     | W     | G. D. Snyder, C. E.     |
| York, .....                   | York, .....         | 5.71  | +0.84 | 1.53  | ..... | 13    | 11    | 15    | 5     | W     | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## JUNE, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.05 inches, is .06 above the normal. At the United States Weather Bureau stations the highest observed was 30.30 inches, at Pittsburgh, on the 17th, and the lowest, 29.77 inches, at Erie, on the 28th.

### Temperature.

The means of the daily maximum and minimum temperatures, 82.0 and 57.8 degrees respectively, give a monthly mean of 69.9 degrees, which is 1.5 degrees above the normal, and 0.3 degrees above the corresponding month of 1898.

The average daily range was 24.2 degrees.

The highest monthly mean was 75.2 degrees, at Philadelphia (Centennial avenue).

The lowest monthly mean was 65.4 degrees, at Smethport. (Somerset, 64.6, appears too low.)

The highest temperature recorded during the month was 101 degrees, on the 6th, at Wilkes-Barre.

The lowest temperature was 32 degrees, on the 11th, at Dushore.

The greatest local monthly range was 62 degrees, at Dushore.

The least local monthly range was 37 degrees, at Williamsport.

The greatest daily range was 48 degrees, at Shingle House.

### Precipitation.

The average precipitation for the month, 3.51 inches, is 0.28 of an inch less than the normal.

The largest totals of rainfall, in inches, were: Chambersburg, 5.97; Greensboro, 5.70; Parkers Landing, 5.58; Lebanon, 5.54; Hawley, 5.50; Beaver Dam, 5.41. The least were: White Haven, 0.65; Lansdale, 0.95; Philadelphia, 1.09; Ottsville, 1.70; Forks of Neshaminy, 1.74; Altoona, 1.79.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 9; clear, 13; partly cloudy, 11; cloudy, 6.



**TOTAL PRECIP**

**3**

**4**

**5**

**5**

**4**

**4**

**5**

**5**

**4**

**4**

**4**

**3**

**3**

**4**

**5**

**SCALE OF SH.**



**Under 2**



**2 to 5**



**6**



ATION, JUNE, 1899.

3

2

3

5

4

ES. IN INCHES.



0.4



4 to 5



Over 5



Climatological Data for Pennsylvania, June, 1899.

| Stations.                   | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |
|-----------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|
|                             |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. |
| Altoona, .....              | Blair, .....        | 1,181            | 12                       | 69.2                                | +0.3                       | 94       | 23    | 43      | 18    |
| Aqueduct, .....             | Perry, .....        | 367              | 11                       | 73.5                                | +1.1                       | 100      | 6     | 53      | 18    |
| Athens, .....               | Bradford, .....     | 768              | .....                    | 68.8                                | .....                      | 98       | 5     | 37      | 11    |
| Butler, .....               | Butler, .....       | .....            | .....                    | 68.4                                | .....                      | 91       | 23    | 38      | 17    |
| Carlisle, .....             | Cumberland, .....   | 480              | 52                       | 68.6                                | -2.5                       | 93       | 7     | 43      | 27    |
| Cassandra, .....            | Cambria, .....      | 2,100            | .....                    | 67.6                                | .....                      | 89       | 23    | 43      | 30    |
| Center Hall, .....          | Centre, .....       | 1,100            | .....                    | 68.0                                | .....                      | 90       | 7     | 40      | 18    |
| Chambersburg, .....         | Franklin, .....     | 1,000            | 37                       | .....                               | .....                      | 98       | 22    | .....   | ..... |
| Coatesville, .....          | Chester, .....      | 380              | 12                       | 73.4                                | +3.3                       | 99       | 6     | 51      | 11    |
| Confluence, .....           | Somerset, .....     | 1,324            | 25                       | .....                               | .....                      | .....    | ..... | 44      | 17    |
| Coopersburg, .....          | Lehigh, .....       | 520              | 10                       | 71.3                                | +1.8                       | 19       | 6     | 50      | 11    |
| Derry Station, .....        | Westmoreland, ..... | 1,172            | .....                    | 71.8                                | .....                      | 96       | 6     | 43      | 17    |
| Dushore, .....              | Sullivan, .....     | 1,500            | .....                    | 66.2                                | .....                      | 94       | 6     | 32      | 11    |
| Dyberry, .....              | Wayne, .....        | 1,100            | 35                       | .....                               | .....                      | .....    | ..... | .....   | ..... |
| Easton, .....               | Northampton, .....  | 325              | 16                       | 72.4                                | +2.0                       | 95       | 6     | 47      | 11    |
| Emporium, .....             | Cameron, .....      | 1,050            | 12                       | 67.6                                | -0.7                       | 93       | 23    | 42      | 11    |
| Erle, .....                 | Erle, .....         | 1,400            | 26                       | 68.0                                | .....                      | 89       | 5     | 48      | 17    |
| Everett a, .....            | Bedford, .....      | 1,060            | .....                    | 70.4                                | .....                      | 93       | 5     | 45      | 18    |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 304              | 11                       | 73.6                                | +2.9                       | .....    | ..... | .....   | ..... |
| Franklin, .....             | Venango, .....      | 955              | 24                       | 68.0                                | .....                      | 92       | 23    | 36      | 17    |
| Grampian, .....             | Clearfield, .....   | 1,450            | 36                       | 68.6                                | +1.7                       | 92       | 23    | 46      | 17    |
| Greensboro, .....           | Greene, .....       | 768              | 11                       | 72.1                                | .....                      | 94       | 6     | 46      | 17    |
| Hamburg, .....              | Berks, .....        | 380              | 9                        | 72.5                                | +1.5                       | 96       | 6     | 46      | 11    |
| Hamlington, .....           | Wayne, .....        | 1,600            | 11                       | 67.4                                | +0.3                       | 93       | 14    | 45      | 18    |
| Harrisburg, .....           | Dauphin, .....      | 361              | 11                       | 72.6                                | +1.6                       | 95       | 6     | 53      | 11    |
| Hawley, .....               | Wayne, .....        | .....            | .....                    | 68.5                                | .....                      | 94       | 24    | 36      | 11    |
| Hawthorn, .....             | Clarion, .....      | .....            | .....                    | 69.1                                | .....                      | 93       | 5     | 39      | 17    |
| Holidaysburg, .....         | Blair, .....        | 947              | 12                       | .....                               | .....                      | .....    | ..... | .....   | ..... |
| Huntingdon, .....           | Huntingdon, .....   | 650              | 12                       | 70.7                                | +1.7                       | 98       | 6     | 43      | 30    |
| Indiana, .....              | Indiana, .....      | 1,350            | 6                        | .....                               | .....                      | .....    | ..... | .....   | ..... |
| Irwin, .....                | Westmoreland, ..... | 584              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... |
| Johnstown, .....            | Cambria, .....      | 1,194            | 12                       | 71.8                                | +1.3                       | 95       | 23    | 46      | 17    |
|                             |                     |                  |                          |                                     |                            |          |       |         | 40    |

Climatological Data for Pennsylvania, June, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. |                       |
|                               |                     |                  |                          |                                     |                            |          |       |         |       | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 72.6                                | +2.9                       | 98       | 6     | 49      | 30    | 39                    |
| Lawrenceville, .....          | Tioga, .....        | 1,006            | .....                    | 67.9                                | .....                      | 95       | 5     | 45      | 22    | 42                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 70.8                                | +1.2                       | 95       | 6     | 43      | 11    | 39                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 67.6                                | +0.8                       | 90       | 5     | 45      | 11    | 32                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 70.0                                | +0.3                       | 96       | 6     | 41      | 11    | 38                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 72.5                                | +2.3                       | 97       | 6     | 46      | 11    | 40                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | .....                               | .....                      | .....    | ..... | 45      | 17    | .....                 |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 70.8                                | +1.0                       | 98       | 6     | 41      | 11    | 42                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 74.9                                | +2.9                       | 97       | 6     | 53      | 7     | 27                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 75.2                                | +2.7                       | 98       | 6     | 56      | 17    | 28                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 72.0                                | +1.0                       | 93       | 5     | 47      | 17    | 30                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 71.0                                | +2.9                       | 96       | 6     | 46      | 11    | 41                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 72.0                                | +0.7                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 70.5                                | .....                      | 94       | 23    | 45      | 11    | 36                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 67.0                                | +0.9                       | 90       | 23    | 36      | 17    | 47                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 68.9                                | .....                      | 93       | 6     | 40      | 11    | 33                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 70.4                                | .....                      | 95       | 6     | 45      | 11    | 34                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 67.4                                | .....                      | 94       | 7     | 34      | 10    | 48                    |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 65.4                                | +0.2                       | 90       | 5     | 36      | 30    | 42                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 64.6                                | .....                      | 92       | 23    | 38      | 30    | 44                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 68.4                                | +1.3                       | 91       | 6     | 42      | 11    | 33                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 69.2                                | +1.6                       | 90       | 6     | 45      | 11    | 32                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | 42      | 11    | .....                 |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 74.2                                | .....                      | 96       | 6     | 52      | 30    | 28                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 65.6                                | .....                      | 83       | 6     | 39      | 11    | 31                    |
| Towanda, .....                | Bradford, .....     | 764              | .....                    | 68.6                                | .....                      | 94       | 5     | 38      | 11    | 39                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 71.3                                | +0.3                       | 93       | 23    | 44      | 17    | 34                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 66.2                                | .....                      | 90       | 5     | 39      | 11    | 38                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 68.1                                | +3.7                       | 93       | 6     | 38      | 11    | 39                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 73.0                                | +2.8                       | 95       | 6     | 54      | 11    | 28                    |

|               |           |       |       |      |       |     |   |    |    |       |
|---------------|-----------|-------|-------|------|-------|-----|---|----|----|-------|
| Westtown J.   | Chester,  | 350   | 11    | 71.6 | ..... | .92 | 7 | 51 | 19 | ..... |
| White Haven,  | Luzerne,  | 1,150 | ..... | 67.6 | ..... | 93  | 6 | 33 | 11 | 45    |
| Wilkes-Barre, | Luzerne,  | 576   | 15    | 73.0 | +2.7  | 101 | 6 | 42 | 11 | 43    |
| Williamsport, | Lycoming, | 530   | 10    | 72.6 | +3.6  | 93  | 6 | 56 | 17 | 26    |
| York,         | York,     | 385   | 12    | 71.8 | +1.6  | 96  | 6 | 47 | 30 | 37    |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. ÷ 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, June, 1899—Continued.

| Stations.                   | Counties.           | Precipitation, in inches. |                            |                       |                             | Sky.               |                    |       | Prevailing direction of wind. | Observer.              |                            |                     |
|-----------------------------|---------------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------------|-------|-------------------------------|------------------------|----------------------------|---------------------|
|                             |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days. |       |                               |                        | Number partly cloudy days. | Number cloudy days. |
|                             |                     |                           |                            |                       |                             |                    |                    |       |                               |                        |                            |                     |
| Altoona, .....              | Blair, .....        | 1.79                      | -2.70                      | 0.44                  | .....                       | 15                 | 10                 | ..... | S                             | Dr. C. B. Dudley.      |                            |                     |
| Aqueduct, .....             | Perry, .....        | 3.70                      | +0.38                      | 1.26                  | .....                       | 13                 | 19                 | 8     | SW                            | Richard Callin.        |                            |                     |
| Athens, .....               | Bradford, .....     | 1.93                      | .....                      | 0.48                  | .....                       | 8                  | 12                 | 10    | SW                            | F. L. Estabrook.       |                            |                     |
| Butler, .....               | Butler, .....       | 3.56                      | .....                      | 1.26                  | .....                       | 11                 | 17                 | 8     | SW                            | Charles A. Donnel.     |                            |                     |
| Carlisle, .....             | Cumberland, .....   | 4.38                      | +0.83                      | 1.00                  | .....                       | 10                 | 17                 | 11    | W                             | J. E. Pague.           |                            |                     |
| Cassandra, .....            | Cambria, .....      | 3.88                      | .....                      | 2.00                  | .....                       | 8                  | 3                  | 26    | NW                            | A. H. Boyle.           |                            |                     |
| Center Hall, .....          | Centre, .....       | 3.95                      | .....                      | 0.77                  | .....                       | 9                  | 13                 | 7     | .....                         | Fred. Kurtz.           |                            |                     |
| Chambersburg, .....         | Franklin, .....     | 5.97                      | +2.31                      | 2.30                  | .....                       | 7                  | 7                  | 14    | W                             | J. C. Boggs.           |                            |                     |
| Coatesville, .....          | Chester, .....      | 2.20                      | -0.97                      | 0.56                  | .....                       | 9                  | 15                 | 14    | S                             | W. T. Gordon.          |                            |                     |
| Confluence, .....           | Somerset, .....     | 4.18                      | -0.22                      | 0.98                  | .....                       | 13                 | 9                  | 6     | W                             | Dr. M. Tannehill.      |                            |                     |
| Coopersburg, .....          | Lehigh, .....       | 3.17                      | +0.22                      | 1.32                  | .....                       | 5                  | 16                 | 11    | NW                            | Dr. H. M. Boye.        |                            |                     |
| Derry Station, .....        | Westmoreland, ..... | 4.92                      | .....                      | 1.95                  | .....                       | 14                 | 18                 | 3     | W                             | D. M. Wineman.         |                            |                     |
| Dushore, .....              | Sullivan, .....     | 3.13                      | .....                      | 0.82                  | .....                       | 0                  | 17                 | 6     | W                             | C. E. Molyneux.        |                            |                     |
| Dyberry, .....              | Wayne, .....        | .....                     | .....                      | .....                 | .....                       | .....              | .....              | ..... | .....                         | Theodore Day.          |                            |                     |
| Easton, .....               | Northampton, .....  | 3.90                      | +0.34                      | 1.39                  | .....                       | 8                  | 17                 | 5     | .....                         | Prof. J. W. Moore.     |                            |                     |
| Emporium, .....             | Cameron, .....      | 3.32                      | -1.42                      | 0.90                  | .....                       | 9                  | 15                 | 12    | W                             | T. B. Lloyd.           |                            |                     |
| Erie, .....                 | Erie, .....         | 1.51                      | -1.01                      | 0.81                  | .....                       | 6                  | 17                 | 11    | SW                            | U. S. Weather Bureau.  |                            |                     |
| Everett's, .....            | Bedford, .....      | 2.51                      | .....                      | 1.10                  | .....                       | 7                  | 16                 | 10    | W                             | F. I. Baker.           |                            |                     |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 1.74                      | -2.25                      | 0.49                  | .....                       | 9                  | 12                 | 9     | W                             | J. C. Hillsman.        |                            |                     |
| Franklin, .....             | Venango, .....      | 3.60                      | -2.05                      | 1.41                  | .....                       | 5                  | 14                 | 12    | W                             | Venango Water Co.      |                            |                     |
| Grampian, .....             | Clearfield, .....   | 3.00                      | -1.29                      | 1.15                  | .....                       | 12                 | 6                  | 15    | SW                            | Nathan Moore.          |                            |                     |
| Greensboro, .....           | Greene, .....       | 5.70                      | +1.08                      | 1.45                  | .....                       | 11                 | 16                 | 5     | S                             | Grant Kramer.          |                            |                     |
| Hamburg, .....              | Berks, .....        | 5.25                      | +2.41                      | 1.45                  | .....                       | 9                  | 7                  | 9     | W                             | Jacob Wunch.           |                            |                     |
| Hamlington, .....           | Wayne, .....        | 3.56                      | -0.11                      | 1.61                  | .....                       | 7                  | 8                  | 9     | NW                            | T. B. Orchard, M. D.   |                            |                     |
| Harrisburg, .....           | Dauphin, .....      | 2.93                      | ..0.41                     | 1.04                  | .....                       | 11                 | 13                 | 9     | W                             | U. S. Weather Bureau.  |                            |                     |
| Hawley, .....               | Wayne, .....        | 5.50                      | .....                      | 2.80                  | .....                       | 8                  | 10                 | 13    | W                             | L. G. Brandhurst.      |                            |                     |
| Hawthorn, .....             | Clarton, .....      | 4.88                      | .....                      | 1.09                  | .....                       | 13                 | 10                 | 20    | W                             | C. E. Sayres, M. D.    |                            |                     |
| Hollidaysburg, .....        | Blair, .....        | .....                     | .....                      | .....                 | .....                       | .....              | .....              | ..... | .....                         | Prof. J. A. Stewart.   |                            |                     |
| Huntingdon, .....           | Huntingdon, .....   | 2.85                      | -1.53                      | 0.93                  | .....                       | 11                 | 14                 | 10    | W                             | Prof. W. J. Swigart.   |                            |                     |
| Indiana, .....              | Indiana, .....      | .....                     | .....                      | .....                 | .....                       | .....              | .....              | ..... | .....                         | Prof. C. B. Robertson. |                            |                     |
| Irwin, .....                | Westmoreland, ..... | 4.72                      | .....                      | 1.27                  | .....                       | 12                 | 20                 | 6     | .....                         | J. B. Gallagher.       |                            |                     |
| Johnstown, .....            | Cambria, .....      | 3.62                      | -1.12                      | 1.35                  | .....                       | 16                 | 8                  | 15    | S                             | E. C. Lorentz.         |                            |                     |

|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 2.94  | -0.37 | 1.29  | ..... | 9     | 15    | 11    | 4     | S     | B. P. Kirk.             |
| Lawrenceville, .....          | Tioga, .....        | 3.78  | ..... | 1.18  | ..... | 6     | 24    | 5     | 1     | W     | C. P. Darling.          |
| Lebanon, .....                | Lebanon, .....      | 5.54  | +2.57 | 0.95  | ..... | 13    | 13    | 14    | 3     | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 4.90  | +0.85 | 0.93  | ..... | 11    | 14    | 7     | 9     | SW    | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 3.83  | -0.22 | 1.07  | ..... | 11    | 14    | 10    | 6     | W     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 4.47  | +0.22 | 2.52  | ..... | 7     | 13    | 14    | 3     | W     | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 3.91  | +0.93 | 1.80  | ..... | 13    | ..... | ..... | ..... | ..... | Prof. J. A. Robb.       |
| Mauch Chunk, .....            | Carbon, .....       | 4.14  | +0.48 | 1.70  | ..... | 9     | 21    | 5     | 4     | W     | Murray Forbes.          |
| Philadelphia, .....           | Philadelphia, ..... | 1.09  | -2.07 | 0.27  | ..... | 9     | 11    | 8     | 11    | SW    | F. C. Wintermute.       |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 1.61  | -1.69 | 0.44  | ..... | 9     | 10    | 10    | 10    | SW    | U. S. Weather Bureau.   |
| Pittsburgh, .....             | Allegheny, .....    | 3.72  | +0.19 | 1.00  | ..... | 11    | 13    | 15    | 2     | N     | John Conly.             |
| Quakertown, .....             | Bucks, .....        | 3.96  | +0.68 | 1.00  | ..... | 9     | 6     | 16    | 8     | SW    | U. S. Weather Bureau.   |
| Reading 2, .....              | Berks, .....        | 3.73  | +0.79 | 0.83  | ..... | 13    | ..... | ..... | ..... | ..... | J. L. Heacock.          |
| Reedsville, .....             | Mifflin, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Renovo, .....                 | Clinton, .....      | 2.85  | ..... | 1.21  | ..... | 9     | 9     | 21    | 0     | ..... | R. K. McDonald.         |
| Saegertown, .....             | Crawford, .....     | 2.14  | -1.09 | 0.66  | ..... | 7     | 8     | 18    | 4     | NW    | Fred. C. Eyster.        |
| Scranton, .....               | Lackawanna, .....   | 2.00  | ..... | 0.87  | ..... | 8     | 19    | 4     | 7     | W     | J. G. Apple.            |
| Selinsgrove, .....            | Snyder, .....       | 4.64  | +0.41 | 1.10  | ..... | 10    | 16    | 12    | 2     | SW    | H. E. Paine.            |
| Shingle House, .....          | Potter, .....       | 3.61  | ..... | 1.02  | ..... | 8     | 11    | 16    | 3     | W     | J. M. Boyer, C. E.      |
| Smethport, .....              | McKean, .....       | 2.68  | -1.78 | 0.55  | ..... | 6     | 12    | 12    | 6     | SW    | Dr. W. H. Tassell.      |
| Somerset, .....               | Somerset, .....     | 4.45  | +0.63 | 1.20  | ..... | 10    | 6     | 6     | 18    | SW    | Armstrong & Brownell.   |
| South Bethlehem, .....        | Northampton, .....  | 3.10  | -1.00 | 1.30  | ..... | 5     | ..... | ..... | ..... | ..... | W. M. Schrock.          |
| South Eaton, .....            | Wyoming, .....      | 2.58  | -0.33 | 1.18  | ..... | 7     | ..... | ..... | ..... | ..... | C. W. Bachert.          |
| State College, .....          | Centre, .....       | 2.41  | +2.06 | 0.40  | ..... | 13    | 17    | 10    | 3     | SW    | B. M. Hall.             |
| St. Marys, .....              | Elk, .....          | 1.56  | ..... | 1.05  | ..... | 8     | 5     | 20    | 4     | SW    | Prof. Wm. Frear.        |
| Swarthmore, .....             | Delaware, .....     | 1.95  | ..... | 0.80  | ..... | 6     | 6     | 27    | 6     | ..... | Wm. E. Wittman.         |
| Swiftwater, .....             | Monroe, .....       | 3.98  | ..... | 0.89  | ..... | 8     | 1     | 11    | 2     | W     | Prof. S. J. Cunningham. |
| Towanda, .....                | Bradford, .....     | 4.52  | ..... | 1.08  | ..... | 8     | 17    | 11    | 2     | W     | Richard Slee, M. D.     |
| Uniontown, .....              | Fayette, .....      | 3.67  | -1.51 | 0.47  | ..... | 11    | 14    | 6     | 10    | W     | Hiram E. Bull, C. E.    |
| Warren, .....                 | Warren, .....       | 2.53  | -1.77 | 0.90  | ..... | 8     | 15    | 12    | 3     | SW    | Wm. Hunt.               |
| Wellsboro, .....              | Tioga, .....        | 4.09  | -0.30 | 2.05  | ..... | 8     | 18    | 11    | 1     | NE    | James K. Simpson.       |
| West Chester, .....           | Chester, .....      | 1.96  | -2.00 | 0.44  | ..... | 12    | 15    | 6     | 9     | N     | H. D. Deming.           |
| Westtown J. ....              | White Haven, .....  | 0.65  | ..... | 0.20  | ..... | 4     | 19    | 5     | 6     | NW    | J. C. Green, D. D. S.   |
| White Haven, .....            | Luzerne, .....      | 2.82  | -1.91 | 1.10  | ..... | 5     | 25    | 0     | 5     | N     | J. W. Hutton.           |
| Wilkes-Barre, .....           | Luzerne, .....      | 4.25  | +0.82 | 1.94  | ..... | 10    | 16    | 5     | 9     | S     | Geo. R. Rodgers.        |
| Williamsport, .....           | Lycoming, .....     | ..... | ..... | ..... | ..... | 12    | 15    | 11    | 4     | W     | A. W. Betterly, M. D.   |
| York, .....                   | York, .....         | 3.54  | +0.38 | 0.87  | ..... | 12    | 12    | 13    | 5     | W     | G. D. Snyder, C. E.     |
|                               |                     |       |       |       |       |       |       |       |       |       | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n," denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## JULY, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 29.99 inches, is .01 below the normal. At the United States Weather Bureau stations the highest observed was 30.29 inches, at Harrisburg, on the 1st, and the lowest, 29.79 inches, at Pittsburgh, on the 25th.

### Temperature.

The means of the daily maximum and minimum temperatures, 84.1 and 60.5 degrees respectively, give a monthly mean of 72.3 degrees, which is 1 degree above the normal, and 2.5 degrees below the corresponding month of 1898.

The average daily range was 23.6 degrees.

The highest monthly mean was 77.2 degrees, at Philadelphia (Centennial avenue). (Aqueduct, 77.7 degrees, appears too high.)

The lowest monthly mean was 67 degrees, at Swiftwater.

The highest temperature recorded during the month was 101 degrees, on the 22d, at Aqueduct.

The lowest temperature was 35 degrees, on the 1st, at Dushore.

The greatest local monthly range was 58 degrees, at Dushore.

The least local monthly range was 36 degrees, at Philadelphia.

The greatest daily range was 45 degrees, at Dushore.

### Precipitation.

The average precipitation for the month, 3.91 inches, is 0.66 of an inch less than the normal.

The largest totals of rainfall, in inches, were: Seisholtzville, 8.24; Hawthorn, 6.95; Confluence, 6.64; Uniontown, 6.44; Hamburg, 6.30; Greensboro, 6.25. The least were: Lewisburg, 1.53; Aqueduct, 1.80; Harrisburg, 1.90; Lebanon, 1.91; Le Roy, 1.93; Williamsport, 2.00.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 10; clear, 12; partly cloudy, 11; cloudy, 8.



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Climatological Data for Pennsylvania, July, 1899.

| Stations.                   | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-----------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                             |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. |                       |
|                             |                     |                  |                          |                                     |                            |          |       |         |       | Greatest daily range. |
| Altoona, .....              | Blair, .....        | 1,181            | 12                       | 70.9                                | -0.4                       | 91       | 4     | 46      | 1     | 39                    |
| Aqueduct, .....             | Perry, .....        | 367              | 11                       | 77.7                                | +2.2                       | 101      | 22    | 55      | 1     | 35                    |
| Athens, .....               | Bradford, .....     | 768              | .....                    | 71.7                                | .....                      | 96       | 4     | 41      | 1     | 44                    |
| Butler, .....               | Butler, .....       | .....            | .....                    | 70.6                                | .....                      | 91       | 4     | 44      | 10    | 36                    |
| Carlisle f, .....           | Cumberland, .....   | 480              | 52                       | 69.6                                | .....                      | 95       | 22    | 43      | 10    | 38                    |
| Cassandra, .....            | Cambria, .....      | 2,100            | .....                    | 70.8                                | .....                      | 89       | 4     | 45      | 1     | 33                    |
| Center Hall, .....          | Centre, .....       | 1,100            | .....                    | 70.8                                | .....                      | 89       | 4     | 45      | 1     | 33                    |
| Chambersburg, .....         | Franklin, .....     | 1,000            | 37                       | .....                               | .....                      | 94       | 22    | .....   | ..... | .....                 |
| Coatesville, .....          | Chester, .....      | 380              | 12                       | 75.8                                | +2.4                       | 100      | 22    | 47      | 1     | 40                    |
| Confluence, .....           | Somerset, .....     | 1,324            | 25                       | .....                               | .....                      | .....    | ..... | 47      | 10    | .....                 |
| Coopersburg, .....          | Lehigh, .....       | 520              | 10                       | 73.2                                | +0.6                       | 91       | 22    | 50      | 1     | 29                    |
| Derry Station a, .....      | Westmoreland, ..... | 1,172            | .....                    | 73.4                                | .....                      | 97       | 24    | 48      | 1     | 39                    |
| Dushore, .....              | Sullivan, .....     | 1,590            | .....                    | 68.8                                | .....                      | 93       | 27    | 35      | 1     | 45                    |
| Dyberry, .....              | Wayne, .....        | 1,100            | 35                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Easton, .....               | Northampton, .....  | 325              | 16                       | 74.0                                | -0.2                       | 91       | 22    | 50      | 1     | 31                    |
| Emporium, .....             | Cameron, .....      | 1,050            | 12                       | 70.4                                | -0.3                       | 93       | 4     | 45      | 1     | 38                    |
| Erie, .....                 | Erie, .....         | 1,400            | 26                       | 71.0                                | -1.0                       | 89       | 8     | 53      | 10    | 22                    |
| Everett c, .....            | Bedford, .....      | 1,060            | .....                    | 72.0                                | .....                      | 91       | 23    | 48      | 4     | 42                    |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 304              | 11                       | 76.0                                | +2.0                       | .....    | ..... | .....   | ..... | .....                 |
| Franklin, .....             | Venango, .....      | 955              | 24                       | 71.2                                | .....                      | 94       | 4     | 43      | 10    | 40                    |
| Grampian, .....             | Clearfield, .....   | 1,450            | 36                       | 71.4                                | +0.8                       | 90       | 22    | 50      | 1     | 30                    |
| Greensboro, .....           | Greene, .....       | 768              | 11                       | 74.2                                | .....                      | 98       | 25    | 50      | 1     | 35                    |
| Hamburg, .....              | Berks, .....        | 280              | 9                        | 74.2                                | .....                      | 98       | 30    | 54      | 10    | 36                    |
| Hamlington, .....           | Wayne, .....        | 1,600            | 11                       | 69.5                                | -0.2                       | 89       | 4     | 42      | 1     | 39                    |
| Harrisburg, .....           | Dauphin, .....      | 361              | 11                       | 75.1                                | +1.1                       | 94       | 22    | 55      | 1     | 27                    |
| Hawley, .....               | Wayne, .....        | .....            | .....                    | 68.8                                | .....                      | 92       | 4     | 46      | 1     | 38                    |
| Hawthorn, .....             | Clarion, .....      | .....            | .....                    | 71.2                                | .....                      | 99       | 23    | 46      | 10    | 42                    |
| Holidaysburg, .....         | Blair, .....        | 947              | 12                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Huntingdon, .....           | Huntingdon, .....   | 650              | 12                       | 72.4                                | +0.8                       | 95       | 8     | 45      | 1     | 43                    |
| Indiana, .....              | Indiana, .....      | 1,350            | 6                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Irwin, .....                | Westmoreland, ..... | 884              | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Johnstown, .....            | Cambria, .....      | 1,184            | 12                       | 73.4                                | +2.0                       | 97       | 23    | 48      | 1     | 46                    |

Climatological Data for Pennsylvania, July, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date.                 |
|                               |                     |                  |                          |                                     |                            |          |       |         |                       |
|                               |                     |                  |                          |                                     |                            |          |       |         | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 74.7                                | +1.2                       | 97       | 22    | 49      | 1                     |
| Lawrenceville c, .....        | Tloga, .....        | 1,006            | .....                    | 70.0                                | .....                      | 94       | 4     | 43      | 31                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 72.0                                | -0.2                       | 96       | 22    | 43      | 31                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 70.5                                | +0.6                       | 90       | 4     | 49      | 1                     |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 73.4                                | +0.8                       | 95       | 27    | 44      | 1                     |
| Lock Haven, .....             | Clinon, .....       | 560              | 12                       | 75.0                                | +3.1                       | 97       | 4     | 47      | 1                     |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 73.2                                | +0.3                       | 95       | 24    | 51      | 10                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 73.2                                | +1.9                       | 95       | 22    | 43      | 1                     |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 76.7                                | +0.7                       | 96       | 22    | 60      | 1                     |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 77.2                                | +1.0                       | 96       | 23    | 60      | 1                     |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 76.0                                | +2.0                       | 95       | 23    | 55      | 10                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 74.0                                | +1.1                       | 96       | 22    | 46      | 1                     |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 74.3                                | -1.1                       | .....    | ..... | .....   | .....                 |
| Reedsville h, .....           | Mifflin, .....      | .....            | .....                    | 72.4                                | .....                      | 93       | 4     | 45      | 1                     |
| Renovo, .....                 | Clinon, .....       | 672              | .....                    | 72.3                                | .....                      | 92       | 22    | 45      | 1                     |
| Saegerstown, .....            | Crawford, .....     | 1,200            | 8                        | 69.6                                | +0.6                       | 93       | 3     | 41      | 1                     |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 71.2                                | .....                      | 94       | 4     | 42      | 1                     |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 73.4                                | -0.1                       | 94       | 27    | 46      | 1                     |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 69.6                                | .....                      | 96       | 4     | 40      | 9                     |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 67.6                                | +0.6                       | 90       | 4     | 38      | 1                     |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 68.6                                | +0.1                       | 93       | 23    | 42      | 10                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| South Eaton, .....            | Wyoming, .....      | 680              | 10                       | 71.6                                | +1.7                       | 91       | 4     | 43      | 1                     |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 72.0                                | +1.9                       | 91       | 23    | 50      | 1                     |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | 43      | 1                     |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 77.0                                | .....                      | 97       | 22    | 61      | 31                    |
| Swiftwater c, .....           | Monroe, .....       | 1,600            | .....                    | 67.0                                | .....                      | 84       | 4     | 43      | 1                     |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 70.6                                | .....                      | 92       | 4     | 41      | 1                     |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 73.9                                | +1.5                       | 92       | 4     | 50      | 1                     |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 68.0                                | .....                      | 90       | 2     | 42      | 10                    |
| Wellsboro, .....              | Tloga, .....        | 1,327            | 21                       | 70.3                                | +1.9                       | 92       | 4     | 40      | 1                     |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 75.4                                | +1.4                       | 96       | 22    | 54      | 1                     |

|                     |                 |       |       |       |       |       |       |       |       |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Westtown, .....     | Chester, .....  | 350   | 11    | ..... | ..... | ..... | ..... | ..... | ..... |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | ..... | ..... | ..... | ..... | ..... | ..... |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | ..... | ..... | ..... | ..... | ..... | ..... |
| York, .....         | York, .....     | 385   | 12    | ..... | ..... | ..... | ..... | ..... | ..... |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2. The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers. A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing. All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, July, 1899—Continued.

| Stations.                    | Counties.           | Precipitation, in inches. |                            |                       |                            |                    |                    | Sky.                       |                     |       | Prevailing direction of wind. | Observers.             |
|------------------------------|---------------------|---------------------------|----------------------------|-----------------------|----------------------------|--------------------|--------------------|----------------------------|---------------------|-------|-------------------------------|------------------------|
|                              |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (unmelted). | Number rainy days. | Number clear days. | Number partly cloudy days. | Number cloudy days. |       |                               |                        |
|                              |                     |                           |                            |                       |                            |                    |                    |                            |                     |       |                               |                        |
| Altoona, .....               | Blair, .....        | 3.57                      | -0.21                      | 0.30                  | .....                      | 15                 | .....              | .....                      | .....               | ..... | S                             | Dr. C. B. Dudley.      |
| Aqueduct, .....              | Perry, .....        | 1.80                      | -2.32                      | 0.84                  | .....                      | 9                  | .....              | 10                         | 12                  | ..... | SW                            | Richard Callin         |
| Athens, .....                | Bradford, .....     | 3.90                      | .....                      | 1.00                  | .....                      | 12                 | .....              | 11                         | 1                   | ..... | NW                            | F. L. Estabrook.       |
| Butler, .....                | Butler, .....       | 2.57                      | .....                      | 1.82                  | .....                      | 12                 | .....              | 7                          | 8                   | ..... | S                             | Charles A. Donnel.     |
| Carlisle, .....              | Cumberland, .....   | .....                     | .....                      | 1.00                  | .....                      | 6                  | .....              | 6                          | 3                   | ..... | NW                            | J. E. Fague.           |
| Cassandra, .....             | Cambria, .....      | 4.56                      | .....                      | 0.97                  | .....                      | 12                 | .....              | 19                         | 6                   | ..... | W                             | A. H. Boyle.           |
| Center Hall, .....           | Centre, .....       | 2.36                      | .....                      | 0.63                  | .....                      | 9                  | .....              | 13                         | 9                   | ..... | W                             | Fred Kurts.            |
| Chambersburg, .....          | Franklin, .....     | 3.06                      | +0.23                      | 1.30                  | .....                      | 9                  | .....              | 13                         | 13                  | ..... | S                             | J. C. Bogg.            |
| Coatesville, .....           | Chester, .....      | 3.46                      | -2.12                      | 1.72                  | .....                      | 8                  | .....              | 12                         | 5                   | ..... | SW                            | Dr. M. Tannehill.      |
| Conduence, .....             | Somerset, .....     | 6.64                      | +1.34                      | 1.71                  | .....                      | 17                 | .....              | 10                         | 4                   | ..... | SW                            | Dr. M. H. Boyle.       |
| Coopersburg, .....           | Lehigh, .....       | 4.53                      | -0.04                      | 1.61                  | .....                      | 8                  | .....              | 16                         | 4                   | ..... | W                             | D. M. Wineman.         |
| Derry Station a, .....       | Westmoreland, ..... | 4.50                      | .....                      | 1.11                  | .....                      | 11                 | .....              | 19                         | 10                  | ..... | SW                            | C. E. Molyneux.        |
| Duane, .....                 | Sullivan, .....     | 2.08                      | .....                      | 0.55                  | .....                      | 7                  | .....              | .....                      | .....               | ..... | .....                         | Theodore Day.          |
| Dyberry, .....               | Wayne, .....        | .....                     | .....                      | .....                 | .....                      | .....              | .....              | .....                      | .....               | ..... | .....                         | Prof. J. W. Moore.     |
| Easton, .....                | Northampton, .....  | 2.89                      | -2.15                      | 1.59                  | .....                      | 10                 | .....              | 4                          | 11                  | ..... | W                             | T. B. Lloyd.           |
| Emporium, .....              | Cameron, .....      | 4.22                      | +0.03                      | 0.82                  | .....                      | 10                 | .....              | 14                         | 3                   | ..... | W                             | U. S. Weather Bureau.  |
| Erie, .....                  | Erie, .....         | 2.60                      | -0.23                      | 0.65                  | .....                      | 20                 | .....              | 14                         | 4                   | ..... | W                             | F. I. Baker.           |
| Everett c, .....             | Bedford, .....      | 3.33                      | .....                      | 1.15                  | .....                      | 11                 | .....              | 9                          | 5                   | ..... | W                             | J. C. Hillman.         |
| Forks of Neeshaminy 1, ..... | Bucks, .....        | 4.49                      | -1.11                      | 0.74                  | .....                      | 14                 | .....              | 13                         | 4                   | ..... | W                             | Venango Water Co.      |
| Franklin, .....              | Venango, .....      | 4.75                      | +0.14                      | 2.15                  | .....                      | 5                  | .....              | 10                         | 9                   | ..... | SW                            | Nathan Moore.          |
| Grampian, .....              | Greene, .....       | 3.34                      | -1.16                      | 1.05                  | .....                      | 11                 | .....              | 4                          | 9                   | ..... | SW                            | Grant Kramer.          |
| Greensboro, .....            | Greene, .....       | 8.25                      | +1.08                      | 2.35                  | .....                      | 11                 | .....              | 19                         | 7                   | ..... | W                             | Jacob                  |
| Hamburg, .....               | Berks, .....        | 6.90                      | +1.94                      | 1.60                  | .....                      | 11                 | .....              | 5                          | 13                  | ..... | NW                            | T. B.                  |
| Hamilton, .....              | Wayne, .....        | 4.18                      | -0.55                      | 1.50                  | .....                      | 16                 | .....              | 9                          | 14                  | ..... | W                             | U. S.                  |
| Harrisburg, .....            | Dauphin, .....      | 5.25                      | -2.40                      | 0.82                  | .....                      | 10                 | .....              | 11                         | 11                  | ..... | W                             | L. G.                  |
| Hawley, .....                | Wayne, .....        | .....                     | .....                      | 1.57                  | .....                      | 9                  | .....              | 8                          | 10                  | ..... | W                             | C. E.                  |
| Hawthorn, .....              | Clarion, .....      | 6.95                      | .....                      | 2.00                  | .....                      | 10                 | .....              | 11                         | 1                   | ..... | W                             | Prof. J. A. Stewart.   |
| Holidaysburg, .....          | Blair, .....        | 3.59                      | +0.33                      | 1.00                  | .....                      | 12                 | .....              | 10                         | 4                   | ..... | W                             | Prof. W. J. Swigart.   |
| Huntingdon, .....            | Huntingdon, .....   | .....                     | .....                      | .....                 | .....                      | .....              | .....              | .....                      | .....               | ..... | .....                         | Prof. C. B. Robertson. |
| Indiana, .....               | Indiana, .....      | 4.63                      | .....                      | 1.42                  | .....                      | .....              | .....              | .....                      | .....               | ..... | .....                         | J. B. Gallagher.       |
| Irwin, .....                 | Westmoreland, ..... | 3.20                      | -1.15                      | 0.78                  | .....                      | 11                 | .....              | 7                          | 6                   | ..... | S                             | E. C. Lgrents          |
| Johnstown, .....             | Cambria, .....      | .....                     | .....                      | .....                 | .....                      | 14                 | .....              | .....                      | .....               | ..... | .....                         | .....                  |





## AUGUST, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.00 inches, is .02 below the normal. At the United States Weather Bureau stations the highest observed was 30.28 inches, at Harrisburg, on the 29th, and Philadelphia, on the 30th, and the lowest, 29.72 inches, at Erie, on the 10th.

### Temperature.

The means of the daily maximum and minimum temperatures, 83.6 and 58.9 degrees respectively, give a monthly mean of 71.2 degrees, which is 1.6 degrees above the normal, and 1.1 degrees below the corresponding month of 1898.

The average daily range was 24.7 degrees.

The highest monthly mean was 74.8 degrees, at Philadelphia. (Aqueduct, 76 degrees, appears too high.)

The lowest monthly mean was 67 degrees, at Dushore. (Swift-water, 65.8 degrees, appears too low.)

The highest temperature recorded during the month was 101 degrees, on the 21st, at Huntingdon.

The lowest temperature was 33 degrees, on the 9th, at Shingle House.

The greatest local monthly range was 65 degrees, at Shingle House.

The least local monthly range was 35 degrees, at Swarthmore.

The greatest daily range was 59 degrees, at Huntingdon and Shingle House.

### Precipitation.

The average precipitation for the month, 4.01 inches, is 0.33 of an inch more than the normal.

The largest totals of rainfall, in inches, were: Carlisle, 10.09; Aqueduct, 8.21; Lansdale, 7.75; Girardville, 7.40; Le Roy, 6.84; York, 6.76. The least were: Erie, 0.07; Saegerstown, 0.54; Parkers Landing, 0.86; Oil City, 1.28; Warren, 1.39; Renovo, 1.40.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 7; clear, 14; partly cloudy, 10; cloudy, 7.



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Climatological Data for Pennsylvania, August, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. |       |
|                               |                     |                  |                          |                                     |                            |          |       |         | Date. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 73.1                                | +1.3                       | 96       | 21    | 50      | 31    |
| Lawrenceville, .....          | Tioga, .....        | 1,000            | .....                    | 68.7                                | .....                      | 96       | 17    | 36      | 49    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 73.4                                | +2.1                       | 97       | 20    | 46      | 1     |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 69.8                                | +1.8                       | 93       | 21    | 48      | 8     |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 73.1                                | +2.1                       | 98       | 14    | 42      | 9     |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 73.8                                | +3.9                       | 100      | 20    | 46      | 9     |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 72.0                                | +1.1                       | 92       | 21    | 51      | 7     |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 71.8                                | +1.6                       | 98       | 21    | 43      | 9     |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 74.8                                | +0.8                       | 95       | 21    | 58      | 42    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 74.6                                | -0.6                       | 95       | 21    | 57      | 24    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 74.0                                | +1.0                       | 96       | 20    | 55      | 17    |
| Reedsville, .....             | Bucks, .....        | 536              | 25                       | 72.2                                | +2.4                       | 96       | 21    | 47      | 32    |
| Quakertown, .....             | Berks, .....        | 280              | 26                       | 71.9                                | -0.9                       | .....    | ..... | .....   | 17    |
| Reading 2, .....              | Mifflin, .....      | .....            | .....                    | 71.4                                | .....                      | 95       | 20    | 45      | 42    |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 71.6                                | .....                      | 96       | 20    | 44      | 9     |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 69.2                                | +2.6                       | 95       | 20    | 40      | 8     |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 70.4                                | .....                      | 98       | 21    | 41      | 9     |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 72.8                                | +1.2                       | 96       | 20    | 44      | 40    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 68.0                                | .....                      | 98       | 19    | 33      | 9     |
| Smethport, .....              | McKean, .....       | 1,500            | .....                    | 67.5                                | +1.9                       | 92       | 20    | 40      | 59    |
| Somersett, .....              | Somersett, .....    | 2,250            | 43                       | 69.2                                | +2.4                       | 93       | 20    | 42      | 48    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | 17    |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 70.2                                | +1.9                       | 95       | 21    | 41      | 40    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 71.0                                | +2.4                       | 96       | 20    | 47      | 38    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 73.6                                | .....                      | 90       | 5     | 55      | 22    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 67.8                                | .....                      | 89       | 21    | 44      | 30    |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 69.6                                | .....                      | 95       | 21    | 39      | 42    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 73.1                                | +1.9                       | 93       | 21    | 53      | 33    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 68.4                                | .....                      | 89       | 20    | 43      | 38    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 69.2                                | +4.9                       | 96       | 20    | 38      | 44    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 7.32                                | +1.4                       | 92       | 21    | 55      | 25    |



|               |       |           |       |       |       |       |       |       |       |       |       |       |
|---------------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Westtown.     | ..... | Chester,  | ..... | 350   | 11    | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| White Haven,  | ..... | Luzerne,  | ..... | 1,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, | ..... | Luzerne,  | ..... | 575   | 15    | ..... | ..... | ..... | ..... | ..... | ..... | 39    |
| Williamsport, | ..... | Lycoming, | ..... | 530   | 10    | ..... | ..... | ..... | ..... | ..... | ..... | 41    |
| York,         | ..... | York,     | ..... | 385   | 12    | ..... | ..... | ..... | ..... | ..... | ..... | 34    |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, August, 1899—Continued.

| Stations.             | Counties.     | Precipitation, in inches. |                            |                       |                             |                    | Sky.                       |       |       | Prevailing direction of wind. | Observers.             |
|-----------------------|---------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|----------------------------|-------|-------|-------------------------------|------------------------|
|                       |               | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days.         |       |       |                               |                        |
|                       |               |                           |                            |                       |                             |                    | Number partly cloudy days. |       |       |                               |                        |
| Altoona.              | Blair.        | 4.46                      | +1.66                      | 2.00                  | .....                       | 8                  | .....                      | 8     | 7     | E                             | Dr. C. B. Dudley.      |
| Aqueduct.             | Perry.        | 8.21                      | +4.10                      | 3.90                  | .....                       | 9                  | .....                      | 16    | 3     | SW                            | Richard Callin.        |
| Athens.               | Bradford.     | 4.52                      | .....                      | 2.79                  | .....                       | 8                  | .....                      | 20    | 4     | SE                            | F. L. Estabrook.       |
| Butler.               | Butler.       | 3.46                      | .....                      | 1.40                  | .....                       | 8                  | .....                      | 17    | 1     | NW                            | Charles A. Donnel.     |
| Carlisle.             | Cumberland.   | 10.09                     | +5.32                      | 4.85                  | .....                       | 8                  | .....                      | 21    | 2     | NW                            | J. E. Pague.           |
| Cassandra.            | Cambria.      | 3.77                      | .....                      | 1.41                  | .....                       | 7                  | .....                      | 10    | 6     | .....                         | A. H. Boyle.           |
| Center Hall.          | Centre.       | 3.79                      | .....                      | 2.20                  | .....                       | 6                  | .....                      | 13    | 10    | .....                         | Fred. Kurts.           |
| Chambersburg.         | Franklin.     | 4.51                      | -0.18                      | 1.37                  | .....                       | 9                  | .....                      | 6     | 15    | W                             | J. C. Boggs.           |
| Coatesville.          | Chester.      | 4.52                      | +0.94                      | 1.45                  | .....                       | 8                  | .....                      | 9     | 5     | NE                            | W. T. Gordon.          |
| Confluence.           | Somerset.     | 2.53                      | +0.98                      | 1.17                  | .....                       | 7                  | .....                      | 9     | 21    | .....                         | Dr. M. Tannehill.      |
| Coopersburg.          | Lehigh.       | 4.88                      | +0.60                      | 3.10                  | .....                       | 8                  | .....                      | 12    | 7     | SW                            | Dr. H. M. Boye.        |
| Derry Station.        | Westmoreland. | 5.06                      | .....                      | 2.29                  | .....                       | 9                  | .....                      | 17    | 10    | W                             | D. M. Wineman.         |
| Dushore.              | Sullivan.     | 3.79                      | .....                      | 1.28                  | .....                       | 7                  | .....                      | 20    | 2     | SW                            | C. E. Molyneux.        |
| Dyberry.              | Wayne.        | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Theodore Day.          |
| Easton.               | Northampton.  | 5.57                      | +1.30                      | 3.95                  | .....                       | 6                  | .....                      | 17    | 9     | .....                         | Prof. J. W. Moore.     |
| Emporium.             | Cameron.      | 3.78                      | +0.08                      | 1.86                  | .....                       | 5                  | .....                      | 19    | 3     | E                             | T. B. Lloyd.           |
| Erie.                 | Erie.         | 0.07                      | +1.71                      | 0.05                  | .....                       | 3                  | .....                      | 16    | 0     | S                             | U. S. Weather Bureau.  |
| Everett.              | Bedford.      | 3.62                      | .....                      | 1.50                  | .....                       | 6                  | .....                      | 21    | 3     | W                             | F. I. Baker.           |
| Forks of Neshaminy 1. | Bucks.        | 2.89                      | +1.47                      | 1.09                  | .....                       | 8                  | .....                      | 15    | 14    | E                             | J. C. Hilsman.         |
| Franklin.             | Venango.      | 1.77                      | -1.73                      | 0.85                  | .....                       | 4                  | .....                      | 20    | 3     | W                             | Venango Water Co.      |
| Gramplan.             | Clearfield.   | 3.54                      | -0.50                      | 1.84                  | .....                       | 10                 | .....                      | 9     | 7     | SW                            | Nathan Moore.          |
| Greensburg.           | Greene.       | 1.88                      | -1.62                      | 0.93                  | .....                       | 8                  | .....                      | 24    | 5     | NE                            | Grant Kramer.          |
| Hamburg.              | Berks.        | 3.00                      | -1.23                      | 0.90                  | .....                       | 6                  | .....                      | 6     | 11    | E                             | Jacob Wunch.           |
| Hamilton.             | Wayne.        | 2.36                      | -2.04                      | 1.00                  | .....                       | 11                 | .....                      | 8     | 15    | E                             | T. B. Orchard, M. D.   |
| Harrisburg.           | Dauphin.      | 4.85                      | +0.59                      | 1.80                  | .....                       | 9                  | .....                      | 8     | 6     | E                             | U. S. Weather Bureau.  |
| Hawley.               | Wayne.        | 2.43                      | .....                      | 0.59                  | .....                       | 7                  | .....                      | 12    | 7     | W                             | L. G. Brandhurst.      |
| Hawthorn.             | Clarion.      | 2.47                      | .....                      | 0.90                  | .....                       | 7                  | .....                      | 20    | 0     | W                             | C. E. Sayres, M. D.    |
| Hollidaysburg.        | Blair.        | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Prof. J. A. Stewart.   |
| Huntingdon.           | Huntingdon.   | 4.53                      | +0.91                      | 2.02                  | .....                       | 10                 | .....                      | ..... | ..... | W                             | Prof. W. J. Swigart.   |
| Indiana.              | Indiana.      | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | Prof. C. B. Robertson. |
| Irwin.                | Westmoreland. | .....                     | .....                      | .....                 | .....                       | .....              | .....                      | ..... | ..... | .....                         | J. B. Gallagher.       |
| Johnstown.            | Cambria.      | 5.34                      | +1.30                      | 1.60                  | .....                       | 9                  | .....                      | 10    | 8     | S                             | E. C. Lorentz.         |

|                         |               |       |       |       |       |       |       |       |       |       |                         |
|-------------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square.         | Chester.      | 4.47  | +0.12 | 1.66  | ..... | 7     | 9     | 14    | 8     | E     | B. P. Kirk.             |
| Lawrenceville.          | Tioga.        | 6.06  | ..... | 4.20  | ..... | 3     | 25    | 6     | 0     | W     | C. P. Darling.          |
| Lebanon.                | Lebanon.      | 3.18  | -1.34 | 1.30  | ..... | 9     | 10    | 14    | 7     | NE    | G. W. Hayes.            |
| Le Roy.                 | Bradford.     | 6.34  | +2.77 | 3.36  | ..... | 7     | 17    | 6     | 8     | SW    | G. W. T. Warburton.     |
| Lewisburg.              | Union.        | 5.49  | +0.40 | 4.63  | ..... | 8     | 18    | 6     | 7     | W     | Prof. W. G. Owen.       |
| Lock Haven.             | Clinton.      | 5.36  | +1.14 | 4.63  | ..... | 7     | 14    | 12    | 5     | W     | Prof. J. A. Robb.       |
| Lycippus.               | Westmoreland. | 3.65  | -0.49 | 1.12  | ..... | 8     | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk.            | Carbon.       | 4.63  | +0.25 | 1.65  | ..... | 7     | 19    | 6     | 6     | S     | F. C. Wintermute.       |
| Philadelphia.           | Philadelphia. | 5.18  | +0.79 | 2.06  | ..... | 8     | 7     | 9     | 15    | NE    | U. S. Weather Bureau.   |
| 1529 Centennial avenue. | Philadelphia. | 5.79  | +2.18 | 2.03  | ..... | 9     | 7     | 11    | 13    | NE    | John Comly.             |
| Pittsburgh.             | Allegheny.    | 2.57  | -0.63 | 0.84  | ..... | 7     | 17    | 13    | 1     | NW    | U. S. Weather Bureau.   |
| Quakertown.             | Bucks.        | 5.76  | +1.52 | 2.27  | ..... | 8     | 5     | 19    | 7     | SE    | J. L. Heacock.          |
| Reading 2.              | Berks.        | 4.62  | +0.73 | 1.06  | ..... | 11    | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedsville.             | Mifflin.      | 2.09  | ..... | 0.91  | ..... | 4     | 25    | 3     | 3     | W     | R. K. McDonald.         |
| Renovo.                 | Clinton.      | 1.40  | ..... | 0.65  | ..... | 7     | 13    | 16    | 2     | ..... | Fred. C. Eyster.        |
| Saegertown.             | Crawford.     | 0.54  | -4.48 | 0.46  | ..... | 3     | 7     | 17    | 7     | NW    | J. G. Apple.            |
| Scranton.               | Lackawanna.   | 3.62  | ..... | 1.09  | ..... | 8     | 18    | 7     | 6     | SW    | H. E. Paine.            |
| Sellsgrove.             | Snyder.       | 4.63  | -0.30 | 2.16  | ..... | 7     | 16    | 11    | 1     | SE    | J. M. Boyer.            |
| Shingle House.          | Potter.       | 3.74  | ..... | 1.74  | ..... | 8     | 19    | 10    | 5     | S     | C. E.                   |
| Smethport.              | McKean.       | 1.70  | -2.56 | 0.50  | ..... | 6     | 17    | 8     | 6     | S     | Dr. W. H. Tassell.      |
| Somerset.               | Somerset.     | 4.17  | -0.19 | 2.34  | ..... | 6     | 42    | 16    | 3     | SW    | Armstrong & Brownell.   |
| South Bethlehem.        | Northampton.  | 4.83  | +0.83 | 3.10  | ..... | 4     | ..... | ..... | ..... | ..... | W. M. Schrock.          |
| South Eaton.            | Wyoming.      | 3.38  | -0.70 | 1.04  | ..... | 7     | 18    | 9     | 4     | NW    | C. W. Bachert.          |
| State College.          | Centre.       | 2.76  | -1.30 | 1.60  | ..... | 6     | ..... | ..... | ..... | ..... | B. M. Hall.             |
| St. Marys.              | Elk.          | 4.09  | ..... | 1.15  | ..... | 8     | 19    | 8     | 4     | W     | Prof. Wm. Frear.        |
| Swiftwater.             | Delaware.     | 3.00  | ..... | 1.83  | ..... | 4     | 10    | 15    | 6     | ..... | Wm. E. Wittman.         |
| Towanda.                | Monroe.       | 4.97  | ..... | 2.35  | ..... | 9     | 1     | 19    | 11    | NW    | Prof. S. J. Cunningham. |
| Uniontown.              | Bradford.     | 5.43  | ..... | 3.33  | ..... | 7     | 19    | 3     | 9     | SW    | Richard Slee.           |
| Warren.                 | Fayette.      | 3.38  | -1.10 | 1.17  | ..... | 7     | 17    | 11    | 3     | S     | Hiram E. Bull.          |
| Wellaboro.              | Warren.       | 1.39  | -3.23 | 0.55  | ..... | 6     | 24    | 7     | 0     | SW    | Wm. Hunt.               |
| West Chester.           | Tioga.        | 3.49  | -0.23 | 1.60  | ..... | 8     | 17    | 10    | 4     | SW    | James K. Simpson.       |
| Westtown.               | Chester.      | 4.38  | +0.01 | 0.95  | ..... | 12    | 19    | 3     | 9     | N     | H. D. Deming.           |
| White Haven.            | Chester.      | ..... | ..... | ..... | ..... | ..... | 16    | 7     | 8     | NE    | J. C. Green.            |
| Wilkes-Barre.           | Luzerne.      | 2.67  | -0.78 | 0.73  | ..... | 7     | ..... | ..... | ..... | ..... | J. W. Hutton.           |
| Williamsport.           | Luzerne.      | 4.15  | -0.40 | 1.22  | ..... | 8     | 15    | 13    | 11    | S     | Geo. R. Rogers.         |
| York.                   | Lycoming.     | 6.76  | +3.08 | 3.17  | ..... | 9     | 13    | 12    | 3     | W     | A. W. Betterly.         |
|                         | York.         | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 6     | W     | G. D. Snyder.           |
|                         |               |       |       |       |       |       |       |       |       |       | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

**SEPTEMBER, 1899—CLIMATOLOGY OF THE MONTH.**

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**Atmospheric Pressure.**

The mean pressure for the month, 30.06 inches, is .02 below the normal. At the United States Weather Bureau stations the highest observed was 30.43 inches, at Harrisburg, on the 15th, and Philadelphia, on the 16th, and the lowest, 29.69 inches, at Philadelphia, on the 26th.

**Temperature.**

The means of the daily maximum and minimum temperatures, 73.1 and 50.6 degrees respectively, give a monthly mean of 61.8 degrees, which is 1.8 degrees below the normal, and 4.2 degrees below the corresponding month of 1898.

The average daily range was 22.5 degrees.

The highest monthly mean was 67.2 degrees, at Philadelphia (Centennial avenue).

The lowest monthly mean was 57 degrees, at Dushore.

The highest temperature recorded during the month was 93 degrees, on the 6th, at Coatesville, and 1st, at Derry Station.

The lowest temperature was 23 degrees, on the 30th, at Franklin.

The greatest local monthly range was 67 degrees, at Franklin.

The least local monthly range was 42 degrees, at Coatesville and Philadelphia.

The greatest daily range was 51 degrees, at Hawthorn.

**Precipitation.**

The average precipitation for the month, 4.70 inches, is 1.47 of an inch more than the normal.

The largest totals of rainfall, in inches, were: Seisholtzville, 9.31; Greensboro, 8.30; Uniontown, 8.17; Quakertown, 8.16; Smiths Corners, 7.72; Bethlehem, 7.31. The least were: Towanda, 2.03; Freeport, 2.09; South Eaton, 2.16; Butler, 2.20; Irwin, 2.41; Athens, 2.49.

**Wind and Weather.**

The prevailing wind was from the west.

Average number of rainy days, 10; clear, 12; partly cloudy, 9; cloudy, 9.

**Corrections.**

Wilkes-Barre, July.—Precipitation should be 3.91 instead of 3.90.

Erie, August.—Precipitation departure should be —3.22 instead of —1.74.



**TOTAL PRECIPITA'**

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SCALE OF SHA



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Climatological Data for Pennsylvania, September, 1899.

| Stations.                      |                            | Counties. |       | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |       |                       |       |       |
|--------------------------------|----------------------------|-----------|-------|------------------|--------------------------|-------------------------------------|-------|-----------------------|-------|-------|
| Mean.                          | Departure from the normal. | Highest.  | Date. |                  |                          | Lowest.                             | Date. | Greatest daily range. |       |       |
| Altoona, .....                 | Blair, .....               | 1,181     | 12    | 60.4             | -2.3                     | 89                                  | 28    | 33                    | 28    | 40    |
| Aqueduct, .....                | Perry, .....               | 367       | 11    | 65.0             | -1.3                     | 92                                  | 30    | 39                    | 30    | 38    |
| Athens, .....                  | Bradford, .....            | 768       | ..... | 59.8             | .....                    | 90                                  | 16    | 32                    | 16    | 46    |
| Butler, .....                  | Butler, .....              | 480       | ..... | 60.3             | .....                    | 89                                  | 28    | 33                    | 28    | 40    |
| Carlisle, .....                | Cumberland, .....          | .....     | ..... | 59.3             | -4.8                     | 88                                  | 28    | 30                    | 28    | 38    |
| Cassandra, .....               | Cambria, .....             | 2,100     | 52    | 59.4             | .....                    | 83                                  | 30    | 37                    | 30    | 31    |
| Center Hall, .....             | Centre, .....              | 1,100     | ..... | 61.4             | .....                    | 85                                  | 28    | 34                    | 28    | 35    |
| Chambersburg, .....            | Franklin, .....            | 1,000     | 37    | 62.0             | -3.3                     | 89                                  | 28    | 35                    | 28    | 34    |
| Coatesville, .....             | Chester, .....             | 330       | 12    | 65.1             | -0.1                     | 93                                  | 28    | 35                    | 28    | 38    |
| Confluence, .....              | Somerset, .....            | 1,324     | 25    | 61.8             | .....                    | 81                                  | 30    | 30                    | 30    | 41    |
| Coopersburg, .....             | Lehigh, .....              | 1,172     | 10    | 63.2             | -2.2                     | 83                                  | 15    | 41                    | 15    | 26    |
| Derry Station, .....           | Westmoreland, .....        | 1,590     | ..... | 65.3             | .....                    | 93                                  | 17    | 36                    | 17    | 48    |
| Dushore, .....                 | Sullivan, .....            | 1,100     | ..... | 57.0             | .....                    | 86                                  | 15    | 27                    | 15    | 46    |
| Dyberry, .....                 | Wayne, .....               | 1,100     | 35    | 57.9             | -0.6                     | 83                                  | 28    | 31                    | 28    | 42    |
| Easton, .....                  | Northampton, .....         | 325       | 16    | 63.6             | -1.5                     | 88                                  | 28    | 40                    | 28    | 38    |
| Emporium, .....                | Cameron, .....             | 1,050     | 12    | 59.2             | -3.3                     | 86                                  | 28    | 33                    | 28    | 36    |
| Ephrata, .....                 | Lancaster, .....           | .....     | ..... | 65.3             | .....                    | 92                                  | 28    | 38                    | 28    | 37    |
| Erie, .....                    | Erie, .....                | 1,400     | 26    | 61.7             | -2.3                     | 91                                  | 30    | 37                    | 30    | 34    |
| Everett b, .....               | Bedford, .....             | 1,060     | ..... | 61.4             | .....                    | 90                                  | 29    | 32                    | 29    | 43    |
| Forks of Neshaminy 1, d, ..... | Bucks, .....               | 304       | 11    | 61.5             | -4.2                     | 90                                  | ..... | .....                 | ..... | ..... |
| Franklin, .....                | Venango, .....             | 955       | 24    | 61.6             | .....                    | 90                                  | 30    | 23                    | 30    | 43    |
| Grantplan, .....               | Clearfield, .....          | 1,450     | 36    | 58.8             | -2.2                     | 91                                  | 30    | 32                    | 30    | 32    |
| Greensboro, .....              | Greene, .....              | 768       | 11    | 64.1             | .....                    | 91                                  | 40    | 35                    | 30    | 40    |
| Hamburg, .....                 | Berks, .....               | 380       | 9     | 64.2             | -2.5                     | 89                                  | 28    | 38                    | 28    | 40    |
| Hamlington, .....              | Wayne, .....               | 1,600     | 11    | 60.1             | -2.1                     | 84                                  | 16    | 34                    | 16    | 40    |
| Harriaburg, .....              | Dauphin, .....             | 361       | 11    | 64.3             | -1.7                     | 86                                  | 30    | 41                    | 30    | 37    |
| Hawley, .....                  | Wayne, .....               | .....     | ..... | 58.4             | .....                    | 84                                  | 15    | 31                    | 15    | 42    |
| Hawthorn, .....                | Clarion, .....             | .....     | ..... | 61.0             | .....                    | 89                                  | 30    | 29                    | 30    | 51    |
| Huntingdon, .....              | Huntingdon, .....          | 650       | 12    | 62.2             | -1.8                     | 91                                  | 28    | 33                    | 28    | 43    |
| Indiana, .....                 | Indiana, .....             | 1,350     | 6     | .....            | .....                    | .....                               | ..... | .....                 | ..... | ..... |
| Irwin, .....                   | Westmoreland, .....        | 884       | ..... | .....            | .....                    | .....                               | ..... | .....                 | ..... | ..... |
| Johnstown, .....               | Cambria, .....             | 1,184     | 12    | 63.4             | -0.9                     | 92                                  | 28    | 35                    | 28    | 40    |

Climatological Data for Pennsylvania, September, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         | Greatest daily range. |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. |                       |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 65.3                                | —0.5                       | 90       | ..... | .....   | 36                    |
| Lawrenceville, .....          | Tioga, .....        | 1,000            | .....                    | 59.4                                | .....                      | 88       | 28    | 30      | 45                    |
| Lebanon a, .....              | Lebanon, .....      | 1,458            | 12                       | 63.4                                | —1.4                       | 88       | 15    | 36      | 34                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 58.4                                | —3.6                       | 86       | 28    | 33      | 26                    |
| Lewistown, .....              | Union, .....        | 450              | 28                       | 62.1                                | —0.1                       | 89       | 30    | 35      | 25                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 63.6                                | —0.6                       | 91       | 28    | 36      | 28                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 64.4                                | —2.6                       | 89       | 82    | 33      | 35                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 61.8                                | —2.3                       | 86       | 30    | 34      | 28                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 67.0                                | —2.0                       | 87       | 15    | 45      | 39                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 67.2                                | —2.0                       | 89       | 30    | 45      | 23                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 65.0                                | —1.0                       | 92       | 27    | 39      | 25                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 62.9                                | —0.6                       | 88       | 30    | 36      | 32                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 62.1                                | —3.4                       | .....    | 15    | .....   | 36                    |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 61.2                                | .....                      | 89       | ..... | 35      | 26                    |
| Saegertown, .....             | Crackford, .....    | 1,200            | 8                        | 60.1                                | —1.4                       | 91       | 28    | 27      | 46                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 61.5                                | .....                      | 87       | 15    | 33      | 44                    |
| Sellinsgrove, .....           | Snyder, .....       | 455              | 11                       | 62.2                                | —1.9                       | 87       | 15    | 36      | 34                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | .....                               | .....                      | 88       | 28    | .....   | .....                 |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 58.3                                | —1.7                       | 92       | 30    | 30      | 40                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 60.6                                | —0.8                       | 86       | 16    | 34      | 39                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 60.6                                | —2.0                       | 88       | 30    | 32      | 32                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | 58.2                                | .....                      | 85       | 15    | 30      | 39                    |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 64.0                                | .....                      | 87       | 30    | 37      | 31                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 57.2                                | .....                      | 78       | 28    | 35      | 28                    |
| Towanda, .....                | Bradford, .....     | 754              | .....                    | 59.5                                | .....                      | 88       | 28    | 32      | 41                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 63.1                                | —2.8                       | 88       | 30    | 38      | 32                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 60.6                                | .....                      | 84       | 28    | 33      | 36                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 58.9                                | +0.1                       | 88       | 28    | 30      | 42                    |
| West Chester, .....           | Chester, .....      | 455              | 45                       | 65.0                                | —0.1                       | 88       | 30    | 42      | 27                    |

|                     |                 |       |       |       |       |       |       |       |       |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Westtown, .....     | Chester, .....  | 350   | 11    | ..... | ..... | ..... | ..... | ..... | ..... |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 61.8  | -1.8  | 87    | 3     | 30    | 29    |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 61.8  | -1.4  | 88    | 3     | 32    | 28    |
| York, .....         | York, .....     | 385   | 12    | 63.4  | -2.5  | 89    | 3     | 35    | 28    |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. ÷ 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, September, 1899—Continued.

| Stations.                      | Counties.           | Precipitation, in inches. |                            |                       |                             | Sky.               |                    |                            | Prevailing direction of wind. | Observers.             |
|--------------------------------|---------------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------------|----------------------------|-------------------------------|------------------------|
|                                |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days. | Number partly cloudy days. |                               |                        |
| Altoona, .....                 | Blair, .....        | 3.82                      | +0.28                      | 1.46                  | .....                       | 12                 | .....              | .....                      | .....                         | Dr. C. B. Dudley.      |
| Aqueduct, .....                | Perry, .....        | 3.92                      | +0.90                      | 1.05                  | .....                       | 11                 | 12                 | 11                         | NW                            | Richard Callin.        |
| Athens, .....                  | Bradford, .....     | 2.49                      | .....                      | 0.96                  | .....                       | 10                 | 16                 | 6                          | SW                            | F. L. Estabrook.       |
| Butler, .....                  | Butler, .....       | 2.20                      | .....                      | 0.68                  | T                           | 9                  | 8                  | 11                         | SW                            | Charles A. Donnel.     |
| Carlisle, .....                | Cumberland, .....   | 4.05                      | +0.40                      | 0.88                  | .....                       | 10                 | 12                 | 5                          | W                             | J. E. Pague.           |
| Cassandra, .....               | Cambria, .....      | 3.70                      | .....                      | 1.25                  | T                           | 12                 | 4                  | 19                         | NW                            | A. H. Boyle.           |
| Center Hall, .....             | Centre, .....       | 4.88                      | +2.25                      | 1.16                  | T                           | 8                  | 16                 | 8                          | .....                         | Fred. Kurtz.           |
| Chambersburg, .....            | Franklin, .....     | 5.70                      | +0.96                      | 1.34                  | .....                       | 8                  | 12                 | 6                          | W                             | J. C. Boggs.           |
| Coatesville, .....             | Chester, .....      | 5.68                      | +2.60                      | 1.72                  | .....                       | 12                 | 15                 | 12                         | S                             | W. T. Gordon.          |
| Confluence, .....              | Somerset, .....     | 7.25                      | +4.06                      | 2.00                  | .....                       | 12                 | 15                 | 0                          | .....                         | Dr. M. Tannehill.      |
| Coopersburg, .....             | Lehigh, .....       | 2.95                      | .....                      | 0.76                  | .....                       | 9                  | 11                 | 7                          | NW                            | Dr. M. H. Boye.        |
| Derry Station, .....           | Westmoreland, ..... | 2.80                      | .....                      | 0.87                  | T                           | 9                  | 14                 | 4                          | W                             | D. M. Wineman.         |
| Dushore, .....                 | Sullivan, .....     | 4.90                      | +1.86                      | 1.65                  | .....                       | 9                  | 15                 | 10                         | S                             | C. E. Molyneux.        |
| Dyberry, .....                 | Wayne, .....        | 6.14                      | +2.60                      | 1.97                  | .....                       | 9                  | 19                 | 8                          | NW                            | Theodore Day.          |
| Easton, .....                  | Northampton, .....  | 4.59                      | +1.45                      | 2.03                  | T                           | .....              | 13                 | .....                      | .....                         | Prof. J. W. Moore.     |
| Emporium, .....                | Cameron, .....      | 7.26                      | .....                      | 3.81                  | .....                       | 11                 | 10                 | 8                          | W                             | T. B. Lloyd.           |
| Ephrata, .....                 | Lancaster, .....    | 3.76                      | +0.27                      | 0.95                  | .....                       | 13                 | 6                  | 17                         | W                             | W. L. Frantz.          |
| Erie, .....                    | Erie, .....         | 4.70                      | .....                      | 1.80                  | .....                       | 7                  | 18                 | 4                          | N                             | U. S. Weather Bureau.  |
| Everett b, .....               | Bedford, .....      | 6.65                      | +2.61                      | 1.82                  | .....                       | 12                 | 13                 | 8                          | W                             | F. I. Baker.           |
| Forks of Neshaminy 1, d, ..... | Bucks, .....        | 2.98                      | -0.73                      | 1.06                  | T                           | 5                  | 8                  | 12                         | N                             | J. C. Hillman.         |
| Franklin, .....                | Venango, .....      | 3.00                      | -0.34                      | 0.74                  | T                           | 10                 | 7                  | 12                         | E                             | Venango Water Co.      |
| Grampian, .....                | Clearfield, .....   | 3.30                      | +5.53                      | 2.35                  | .....                       | 13                 | 20                 | 13                         | SW                            | Nathan Moore.          |
| Greensboro, .....              | Greene, .....       | 6.30                      | +3.64                      | 2.30                  | .....                       | 9                  | 7                  | 2                          | SW                            | Grant Kramer.          |
| Hamburg, .....                 | Berks, .....        | 4.43                      | +0.59                      | 1.19                  | .....                       | 14                 | 8                  | 8                          | S                             | Jacob Wunch.           |
| Hamilton, .....                | Wayne, .....        | 4.25                      | +1.26                      | 0.92                  | .....                       | 10                 | 14                 | 9                          | NW                            | T. B. Orchard, M. D.   |
| Harrisburg, .....              | Dauphin, .....      | 3.86                      | .....                      | 2.22                  | .....                       | 8                  | 9                  | 7                          | SE                            | U. S. Weather Bureau.  |
| Hawthorn, .....                | Wayne, .....        | 3.76                      | .....                      | 0.83                  | T                           | 8                  | 9                  | 14                         | N                             | L. G. Brandhurst.      |
| Huntingdon, .....              | Clarion, .....      | 3.65                      | -0.06                      | 1.57                  | .....                       | 10                 | 13                 | 11                         | W                             | C. E. Sayres, M. D.    |
| Indiana, .....                 | Huntingdon, .....   | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....                         | Prof. W. J. Swigart.   |
| Irwin, .....                   | Indiana, .....      | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....                         | Prof. C. B. Robertson. |
| Johnstown, .....               | Westmoreland, ..... | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....                         | J. B. Gallagher.       |
| .....                          | Cambria, .....      | 3.45                      | +0.23                      | 1.05                  | .....                       | 12                 | 9                  | 14                         | S                             | E. C. Lorentz.         |

|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 4.55  | +0.60 | 0.94  | ..... | 11    | 14    | 14    | 2     | S     | B. P. Klrk.             |
| Lawrenceville, .....          | Tloga, .....        | 3.58  | ..... | 1.08  | ..... | 8     | 16    | 7     | 7     | W     | C. P. Darling.          |
| Lebanon a, .....              | Lebanon, .....      | 6.20  | +3.08 | 1.67  | ..... | 14    | 14    | 7     | 8     | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 2.56  | -0.31 | 0.75  | T     | 14    | 13    | 6     | 11    | SW    | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 4.36  | +1.25 | 0.83  | ..... | 10    | 12    | 8     | 10    | S     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 3.63  | -0.10 | 0.92  | ..... | 9     | 12    | 8     | 10    | W     | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 3.63  | +0.43 | 0.91  | ..... | 12    | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 6.05  | +2.80 | 2.50  | ..... | 11    | 19    | 5     | 6     | W     | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 3.66  | +0.53 | 1.06  | ..... | 9     | 14    | 9     | 7     | S     | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 3.94  | +1.13 | 1.38  | ..... | 9     | 15    | 9     | 6     | S     | John Comly.             |
| Pittsburgh, .....             | Allegheny, .....    | 2.66  | +0.08 | 0.66  | ..... | 11    | 13    | 9     | 8     | NW    | U. S. Weather Bureau.   |
| Quakertown, .....             | Bucks, .....        | 3.16  | +4.31 | 2.12  | ..... | 9     | 10    | 11    | 9     | SW    | J. L. Heacock.          |
| Reading 2, .....              | Berks, .....        | 4.79  | +1.09 | 1.22  | ..... | 13    | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedsville, .....             | Mifflin, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. K. McDonald.         |
| Renovo, .....                 | Clinton, .....      | 4.61  | ..... | 1.33  | T     | 13    | 9     | 16    | 5     | ..... | Fred. C. Eyster.        |
| Saegertown, .....             | Crackford, .....    | 6.25  | +1.70 | 2.02  | T     | 18    | 3     | 16    | 11    | NW    | J. G. Apple.            |
| Scranton, .....               | Lackawanna, .....   | 3.47  | ..... | 0.98  | ..... | 10    | 13    | 8     | 9     | W     | H. E. Paine.            |
| Sellingsgrove, .....          | Snyder, .....       | 4.75  | +0.98 | 1.02  | ..... | 12    | 13    | 12    | 5     | W     | J. M. Boyer, C. E.      |
| Shingle House, .....          | Potter, .....       | 3.13  | ..... | 0.95  | T     | 8     | 9     | 10    | 11    | W     | Dr. W. H. Tassell.      |
| Smethport, .....              | McKean, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Armstrong & Brownell.   |
| Somerset, .....               | Somerset, .....     | 7.18  | +3.89 | 2.73  | ..... | 11    | 5     | 16    | 9     | NW    | W. M. Schrock.          |
| South Bethlehem, .....        | Northampton, .....  | 7.31  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | C. W. Bachert.          |
| South Eaton, .....            | Wyoming, .....      | 2.16  | -0.23 | 0.49  | ..... | 11    | 15    | 9     | 6     | NW    | B. M. Hall.             |
| State College, .....          | Centre, .....       | 3.54  | +0.85 | 1.01  | T     | 13    | 20    | 6     | 4     | ..... | Prof. Wm. Frear.        |
| St. Marys, .....              | Elk, .....          | 4.96  | ..... | 2.33  | ..... | 8     | 7     | 8     | 15    | ..... | Wm. E. Wittman.         |
| Swarthmore, .....             | Delaware, .....     | 3.95  | ..... | 1.70  | ..... | 5     | 11    | 10    | 9     | NW    | Prof. S. J. Cunningham. |
| Swiftwater, .....             | Monroe, .....       | 7.30  | ..... | 4.03  | ..... | 10    | 17    | 9     | 4     | NW    | Richard Snee, M. D.     |
| Towanda, .....                | Bradford, .....     | 2.63  | ..... | 0.72  | ..... | 12    | 11    | 8     | 11    | NW    | Hiram E. Bull, C. E.    |
| Uniontown, .....              | Fayette, .....      | 8.17  | +5.14 | 2.03  | ..... | 12    | 15    | 8     | 7     | NW    | Wm. Hunt.               |
| Warren, .....                 | Warren, .....       | 7.19  | +3.45 | 3.56  | 0.2   | 12    | 9     | 13    | 8     | N     | James K. Simpson.       |
| Warren, .....                 | Warren, .....       | 2.97  | +0.24 | 1.10  | T     | 8     | 14    | 6     | 10    | N     | H. D. Deming.           |
| Wellsboro, .....              | Tloga, .....        | 6.55  | +2.22 | 2.50  | ..... | 11    | 18    | 3     | 9     | S     | J. C. Green, D. D. S.   |
| West Chester, .....           | Chester, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | J. W. Hutton.           |
| Westtown, .....               | Chester, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Geo. R. Rogers.         |
| White Haven, .....            | Luzerne, .....      | 4.29  | +1.16 | 1.34  | ..... | 11    | 11    | 6     | 13    | S     | A. W. Beterly, M. D.    |
| Wilkes-Barre, .....           | Lycoming, .....     | 2.94  | -0.65 | 0.96  | ..... | 8     | 13    | 9     | 8     | W     | G. D. Snyder, C. E.     |
| Williamsport, .....           | York, .....         | 6.07  | +2.27 | 1.15  | ..... | 10    | 16    | 9     | 5     | W     | Mrs. L. H. Grenewald.   |
| York, .....                   | York, .....         | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .....                   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2. The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers. A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing. All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## OCTOBER, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.22 inches, is .14 above the normal. At the United States Weather Bureau stations the highest observed was 30.59 inches, at Erie, on the 2d, and the lowest, 29.63 inches, at Philadelphia, on the 31st.

### Temperature.

The means of the daily maximum and minimum temperatures, 66.3 and 42.8 degrees respectively, give a monthly mean of 54.6 degrees, which is 3.9 degrees above the normal, and 0.8 degrees above the corresponding month of 1898.

The average daily range was 23.5 degrees.

The highest monthly mean was 59.5 degrees, at Pittsburgh.

The lowest monthly mean was 49.7 degrees, at Dushore.

The highest temperature recorded during the month was 94 degrees, on the 16th, at Derry Station.

The lowest temperature was 15 degrees, on the 22d, at Dushore and Hawley.

The greatest local monthly range was 69 degrees, at Derry Station and Hawley.

The least local monthly range was 46 degrees, at Philadelphia.

The greatest daily range was 61 degrees, at Lawrenceville.

### Precipitation.

The average precipitation for the month, 1.55 inches, is 1.75 of an inch less than the normal.

The largest totals of rainfall, in inches, were: St. Marys, 3.81; Williamsport, 3.26; Carlisle, 2.98; Somerset, 2.79; Wellsboro, 2.63; Franklin and Smethport, 2.58. The least were: West Newton, 0.53; Scranton, 0.63; Dyberry, 0.69; Lock No. 4, 0.69; Confluence, 0.70; Irwin and Hamilton, 0.71.

### Wind and Weather.

The prevailing wind was from the southwest.

Average number of rainy days, 6; clear, 13; partly cloudy, 8; cloudy, 10.

### Errata.

Saegerstown, September.—Mean temperature should be 60.6 degrees instead of 60.1 degrees.



**TOTAL PRECIPIT.**

**SCALE OF SHA**



**Under 1      1 to 2**



MON, OCTOBER, 1899.

8. IN INCHES.



2 to 3

Over 3





Climatological Data for Pennsylvania, October, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 57.2                                | +4.6                       | 81       | 13    | 26      | 23    | 33                    |
| Lawrenceville e, .....        | Tioga, .....        | 1,006            | .....                    | 50.1                                | .....                      | 84       | 15    | 18      | 3     | 61                    |
| Lebanon b, .....              | Lebanon, .....      | 458              | 12                       | 54.6                                | +3.1                       | 79       | 13    | 24      | 22    | 36                    |
| Le Roy, .....                 | Bradford, .....     | 1,490            | 11                       | 53.4                                | +5.1                       | 79       | 26    | 22      | 23    | 35                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 54.0                                | +4.4                       | 79       | 13    | 25      | 3     | 37                    |
| Lock Haven, .....             | Clinton, .....      | 600              | 12                       | 55.8                                | +4.6                       | 82       | 12    | 25      | 22    | 41                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 57.2                                | +3.5                       | 87       | 16    | 28      | 1     | 37                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 54.4                                | +4.2                       | 83       | 15    | 21      | 23    | 39                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 58.6                                | +2.6                       | 80       | 13    | 34      | 22    | 32                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 59.0                                | +3.3                       | 80       | 12    | 33      | 23    | 24                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 59.5                                | +4.5                       | 86       | 15    | 30      | 1     | 33                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 54.8                                | +3.4                       | 82       | 13    | 23      | 22    | 36                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 53.3                                | +0.6                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 54.3                                | .....                      | 82       | 15    | 25      | 22    | 40                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 53.7                                | +4.4                       | 85       | 15    | 23      | 2     | 44                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 53.2                                | .....                      | 82       | 13    | 19      | 22    | 40                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 53.4                                | +2.8                       | *76      | 15    | 25      | 22    | 25                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | .....                               | .....                      | 81       | 14    | .....   | ..... | 52                    |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 51.6                                | +4.2                       | 83       | 15    | 20      | 3     | 50                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 53.5                                | +5.9                       | 82       | 15    | 21      | 1     | 45                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 53.6                                | +4.0                       | 80       | 15    | 19      | 22    | 38                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 54.2                                | +4.9                       | 79       | 15    | 26      | 22    | 34                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | 52.5                                | .....                      | 80       | 15    | 23      | 3     | 46                    |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 50.6                                | .....                      | 75       | 15    | 20      | 22    | 36                    |
| Towanda, .....                | Bradford, .....     | 764              | .....                    | 53.1                                | .....                      | 79       | 15    | 19      | 23    | 44                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 57.0                                | +4.1                       | 81       | 28    | 28      | 1     | 32                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 55.2                                | .....                      | 83       | 15    | 24      | 3     | 40                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 52.6                                | +4.7                       | 81       | 14    | 22      | 22    | 43                    |
| West Chester, .....           | Chester, .....      | 455              | 46                       | 56.8                                | +5.7                       | 74       | 15    | 29      | 22    | 28                    |

|               |       |       |       |       |       |       |       |       |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Westtown.     | 350   | 11    | 55.0  | 76    | 13    | 29    | 22    | 32    |
| White Haven.  | 1,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre. | 575   | 15    | 53.5  | 81    | 13    | 23    | 22    | 28    |
| Williamsport. | 530   | 10    | 53.0  | 80    | 13    | 26    | 22    | 37    |
| York.         | 385   | 12    | 54.2  | 78    | 13    | 24    | 22    | 34    |
| Chester.      |       |       |       |       |       |       |       |       |
| Luzerne.      |       |       |       |       |       |       |       |       |
| Lycoming.     |       |       |       |       |       |       |       |       |
| York.         |       |       |       |       |       |       |       |       |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.

All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, October, 1899—Continued.

| Stations.                   | Counties.           | Precipitation, in inches. |                            |                       |                             |                    | Sky.               |                            |                     | Prevailing direction of wind. | Observers.             |
|-----------------------------|---------------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------------|----------------------------|---------------------|-------------------------------|------------------------|
|                             |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number of days.    |                            |                     |                               |                        |
|                             |                     |                           |                            |                       |                             |                    | Number clear days. | Number partly cloudy days. | Number cloudy days. |                               |                        |
| Altoona, .....              | Blair, .....        | 1.23                      | -2.04                      | 0.62                  | .....                       | 6                  | 14                 | 7                          | 10                  | NW                            | Dr. C. B. Dudley.      |
| Aqueduct, .....             | Perry, .....        | 1.55                      | -1.58                      | 0.74                  | .....                       | 7                  | 16                 | 11                         | 4                   | SW                            | Richard Callin.        |
| Athens, .....               | Bradford, .....     | 1.38                      | .....                      | 0.56                  | .....                       | 8                  | 16                 | 4                          | 11                  | SW                            | F. L. Estabrook.       |
| Butler, .....               | Butler, .....       | 2.24                      | .....                      | 0.90                  | .....                       | 9                  | 13                 | 13                         | 5                   | S                             | Charles A. Donnel.     |
| Carlisle, .....             | Cumberland, .....   | 2.98                      | -0.57                      | 2.00                  | .....                       | 6                  | 9                  | 10                         | 12                  | SW                            | J. E. Pague.           |
| Cassandra, .....            | Cambria, .....      | 0.79                      | .....                      | 0.32                  | .....                       | 6                  | 17                 | 1                          | 13                  | .....                         | A. H. Boyle.           |
| Center Hall, .....          | Centre, .....       | 2.12                      | .....                      | 1.43                  | .....                       | 4                  | 12                 | 11                         | 8                   | W                             | Fred. Kurtz.           |
| Chambersburg a, .....       | Franklin, .....     | 1.55                      | -2.21                      | 0.43                  | .....                       | 6                  | 17                 | 8                          | 6                   | S                             | J. C. Boggs.           |
| Coatesville, .....          | Chester, .....      | 1.74                      | -2.01                      | 0.71                  | .....                       | 6                  | 17                 | 1                          | 8                   | NW                            | W. T. Gordon.          |
| Confluence, .....           | Somerset, .....     | 0.70                      | -2.29                      | 0.31                  | .....                       | 4                  | 8                  | 1                          | 22                  | SW                            | Dr. M. Tannehill.      |
| Coopersburg, .....          | Lehigh, .....       | 1.48                      | -2.33                      | 0.64                  | .....                       | 5                  | 13                 | 8                          | 10                  | SW                            | Dr. M. H. Boye.        |
| Derry Station, .....        | Westmoreland, ..... | 0.72                      | .....                      | 0.50                  | .....                       | 3                  | 10                 | 4                          | 7                   | NE                            | D. M. Wineman.         |
| Dushore, .....              | Sullivan, .....     | 1.36                      | .....                      | 0.47                  | .....                       | 4                  | 13                 | 6                          | 12                  | SW                            | C. E. Molyneux.        |
| Dyberry, .....              | Wayne, .....        | 0.69                      | -2.62                      | 0.25                  | .....                       | 6                  | 13                 | 11                         | 7                   | W                             | Theodore Day.          |
| Easton, .....               | Northampton, .....  | 0.82                      | -2.48                      | 0.45                  | .....                       | 6                  | 13                 | 4                          | 14                  | .....                         | Prof. J. W. Moore.     |
| Emporium, .....             | Cameron, .....      | 2.21                      | -2.21                      | 0.79                  | .....                       | 5                  | 19                 | 7                          | 5                   | E                             | T. B. Lloyd.           |
| Ephrata, .....              | Lancaster, .....    | 1.18                      | .....                      | 0.53                  | .....                       | 6                  | 14                 | 6                          | 11                  | SE                            | W. L. Frantz.          |
| Erie, .....                 | Erie, .....         | 2.04                      | -0.50                      | 0.70                  | .....                       | 11                 | 10                 | 14                         | 7                   | S                             | U. S. Weather Bureau.  |
| Everett, .....              | Bedford, .....      | 1.10                      | .....                      | 0.50                  | .....                       | 3                  | 24                 | 3                          | 3                   | W                             | F. I. Baker.           |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 2.04                      | -1.55                      | 0.79                  | .....                       | 6                  | 11                 | 9                          | 11                  | E                             | J. C. Hillsman.        |
| Franklin, .....             | Venango, .....      | 2.58                      | -0.43                      | 0.98                  | .....                       | 5                  | 12                 | 15                         | 4                   | W                             | Venango Water Co.      |
| Gramplan, .....             | Clearfield, .....   | 1.56                      | -1.32                      | 0.94                  | .....                       | 3                  | 7                  | 17                         | 7                   | SW                            | Nathan Moore.          |
| Greensboro, .....           | Greene, .....       | 1.18                      | -1.78                      | 0.33                  | .....                       | 6                  | 16                 | 4                          | 11                  | SW                            | Grant Kramer.          |
| Hamburg, .....              | Berks, .....        | 1.40                      | -2.84                      | 0.40                  | .....                       | 5                  | 12                 | 8                          | 11                  | S                             | Jacob Wunch.           |
| Hamlington, .....           | Wayne, .....        | 0.71                      | -3.07                      | 0.25                  | .....                       | 7                  | 14                 | 5                          | 12                  | W                             | T. B. Orchard, M. D.   |
| Harrisburg, .....           | Dauphin, .....      | 0.78                      | -2.15                      | 0.23                  | .....                       | 7                  | 9                  | 8                          | 14                  | NE                            | U. S. Weather Bureau.  |
| Hawley, .....               | Wayne, .....        | 2.30                      | .....                      | 0.87                  | .....                       | 4                  | 10                 | 14                         | 7                   | W                             | L. G. Brandhurst.      |
| Hawthorn, .....             | Clarion, .....      | 2.20                      | .....                      | 0.75                  | .....                       | 5                  | 13                 | 13                         | 5                   | W                             | C. E. Sayres, M. D.    |
| Huntingdon, .....           | Huntingdon, .....   | 1.26                      | -1.97                      | 0.55                  | .....                       | 6                  | 12                 | 10                         | 9                   | W                             | Prof. W. J. Swigart.   |
| Indiana, .....              | Indiana, .....      | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | Prof. C. B. Roberston. |
| Irwin, .....                | Westmoreland, ..... | .....                     | .....                      | .....                 | .....                       | .....              | .....              | .....                      | .....               | .....                         | J. B. Gallagher.       |
| Johnstown, .....            | Cambria, .....      | 0.97                      | -1.55                      | 0.66                  | T                           | 5                  | 9                  | 16                         | 6                   | S                             | E. C. Lorentz.         |

|                               |                     |       |        |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 2.03  | -1.47  | 1.22  | ..... | 6     | 13    | 10    | 8     | SW    | B. P. Kirk.             |
| Lawrenceville e, .....        | Tloga, .....        | 0.95  | -2.82  | 0.23  | ..... | 9     | 11    | 10    | 9     | SW    | C. P. Darling.          |
| Lebanon b, .....              | Lebanon, .....      | 1.34  | -2.31  | 0.60  | ..... | 8     | 11    | 6     | 14    | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 1.36  | -1.95  | 0.60  | ..... | 7     | 10    | 9     | 12    | W     | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 1.12  | -2.64  | 0.52  | ..... | 6     | 12    | 8     | 11    | W     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 2.31  | ..0.15 | 1.55  | ..... | 7     | ..... | ..... | ..... | ..... | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 1.49  | -2.29  | 0.63  | ..... | 6     | 15    | 4     | 12    | S     | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 1.98  | -0.88  | 0.79  | ..... | 7     | 13    | 6     | 12    | SW    | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 2.06  | -1.23  | 0.76  | ..... | 7     | 13    | 7     | 11    | SW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Allegheny, .....    | 2.10  | -0.28  | 1.22  | ..... | 7     | 14    | 8     | 9     | SW    | John Comly.             |
| Pittsburgh, .....             | Bucks, .....        | 1.17  | -2.29  | 0.35  | ..... | 6     | 10    | 11    | 10    | SW    | U. S. Weather Bureau.   |
| Quakertown, .....             | Berks, .....        | 1.30  | -2.63  | 0.50  | ..... | 6     | ..... | ..... | ..... | ..... | J. L. Heacock.          |
| Reading 2, .....              | Mifflin, .....      | 1.23  | .....  | 0.65  | ..... | 5     | 15    | 12    | 4     | ..... | Franklin Yager.         |
| Reedsville, .....             | Clinton, .....      | 0.79  | -1.60  | 0.70  | ..... | 3     | 5     | 13    | 13    | SW    | R. K. McDonald.         |
| Renovo, .....                 | Crawford, .....     | 0.63  | .....  | 0.30  | ..... | 3     | 13    | 7     | 11    | S     | Fred. C. Eyster.        |
| Saegertown, .....             | Lackawanna, .....   | 1.53  | -2.42  | 0.32  | ..... | 7     | 7     | 16    | 8     | N     | J. G. Apple.            |
| Scranton, .....               | Snyder, .....       | 2.38  | .....  | 0.94  | ..... | 5     | 13    | 12    | 6     | SE    | H. E. Paine.            |
| Sellinsgrove, .....           | Potter, .....       | 2.58  | .....  | 0.80  | ..... | 7     | 11    | 6     | 14    | SW    | J. M. Boyer, C. E.      |
| Shingle House, .....          | McKean, .....       | 2.79  | ..0.28 | 1.51  | ..... | 5     | 15    | 12    | 4     | NW    | Dr. W. H. Tassell.      |
| Smethport, .....              | Somerset, .....     | 1.15  | -2.04  | 0.95  | ..... | 2     | ..... | ..... | ..... | ..... | Armstrong & Brownell.   |
| Somerset, .....               | Northampton, .....  | 1.10  | -2.34  | 0.69  | ..... | 5     | 16    | 7     | 8     | SE    | W. M. Schrock.          |
| South Bethlehem, .....        | Wyoming, .....      | 1.40  | -1.84  | 0.86  | ..... | 6     | 18    | 6     | 7     | E     | C. W. Bachert.          |
| South Eaton, .....            | Centre, .....       | 3.81  | .....  | 1.70  | ..... | 5     | ..... | ..... | ..... | ..... | B. M. Hall.             |
| State College, .....          | Elk, .....          | ..... | .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Prof. Wm. Frear.        |
| St. Marys, .....              | Delaware, .....     | 2.07  | .....  | 0.90  | ..... | 5     | 19    | 4     | 8     | W     | Wm. E. Wittman.         |
| Swarthmore, .....             | Monroe, .....       | 1.21  | .....  | 0.50  | ..... | 8     | 13    | 3     | 15    | S     | Prof. S. J. Cunningham. |
| Swittwater, .....             | Bradford, .....     | 1.76  | .....  | 0.95  | ..... | 6     | 21    | 6     | 4     | SW    | Richard Slee, M. D.     |
| Towanda, .....                | Fayette, .....      | 1.44  | -1.57  | 0.57  | ..... | 8     | 14    | 11    | 6     | S     | Hiram E. Bull, C. E.    |
| Uniontown, .....              | Warren, .....       | 2.63  | -1.70  | 1.25  | ..... | 8     | 15    | 4     | 12    | S     | Wm. Hunt.               |
| Warren, .....                 | Tloga, .....        | 1.91  | -0.98  | 0.93  | ..... | 7     | 17    | 2     | 12    | NW    | James K. Simpson.       |
| Wellsboro, .....              | Chester, .....      | 1.56  | -2.00  | 0.77  | ..... | 4     | 19    | 6     | 6     | SW    | H. D. Deming.           |
| West Chester, .....           | Chester, .....      | ..... | .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | J. C. Green, D. D. S.   |
| Westtown, .....               | Luzerne, .....      | 1.29  | -1.82  | 0.65  | ..... | 3     | 13    | 3     | 15    | E     | J. W. Hutton.           |
| White Haven, .....            | Luzerne, .....      | 3.26  | -0.74  | 1.99  | ..... | 6     | 16    | 10    | 5     | W     | Geo. R. Rogers.         |
| Wilkes-Barre, .....           | Lycoming, .....     | 0.92  | ..2.37 | 0.24  | ..... | 7     | 10    | 10    | 11    | W     | A. W. Betterly, M. D.   |
| Williamsport, .....           | York, .....         | ..... | .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | G. D. Snyder, C. E.     |
| York, .....                   | .....               | ..... | .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record; for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## NOVEMBER, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.09 inches, is 0.2 below the normal. At the United States Weather Bureau stations the highest observed was 30.53 inches, at Harrisburg, on the 7th, and the lowest, 29.43 inches, at Philadelphia, on the 1st.

### Temperature.

The means of the daily maximum and minimum temperatures, 50.2 and 32.8 degrees respectively, give a monthly mean of 41.5, which is 1.1 degree above the normal, and 1.5 degrees above the corresponding month of 1898.

The average daily range was 17.4 degrees.

The highest monthly mean was 46.9 degrees, at Philadelphia (Centennial avenue).

The lowest monthly mean was 36.7 degrees, at Swiftwater.

The highest temperature recorded during the month was 72 degrees, on the 19th, at Hawthorn.

The lowest temperature was 8 degrees, on the 12th, at Shingle House.

The greatest monthly range was 52 degrees, at Hawley.

The least local monthly range was 30 degrees, at Hamburg.

The greatest daily range was 44 degrees, at Carlisle.

### Precipitation.

The average precipitation for the month, 2.66 inches, is 0.96 of an inch less than the normal.

The largest totals of rainfall and melted snow, in inches, were: Davis Island Dam, 4.86; Derry Station, 4.29; Johnstown, 4.26; West Newton, 4.06; Renovo, 3.93; Confluence, 3.90. The least were: Franklin, 0.61; Erie, 1.31; Everett, 1.40; Shingle House, 1.42; Elwood Junction, 1.60; Brookville, 1.67.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 7; clear, 10; partly cloudy, 8; cloudy, 11.





**TOTAL PRECIPITA**

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ON, NOVEMBER, 1899.

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Over 4





Climatological Data for Pennsylvania, November, 1899—Continued.

| Stations.                     | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         |       |                       |
|-------------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|-----------------------|
|                               |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. |
| Kennett Square, .....         | Chester, .....      | 275              | 10                       | 44.2                                | +1.5                       | 67       | 11    | 22      | 13    | 35                    |
| Lancaster b, .....            | Lancaster, .....    | .....            | .....                    | 43.4                                | .....                      | 64       | 22    | 23      | 13    | 33                    |
| Lawrenceville e, .....        | Tioga, .....        | 1,006            | .....                    | 36.0                                | .....                      | 57       | 9     | 15      | 7     | 35                    |
| Lebanon, .....                | Lebanon, .....      | 458              | 12                       | 42.0                                | +0.3                       | 61       | 10    | 22      | 14    | 29                    |
| Le Roy, .....                 | Bradford, .....     | 1,400            | 11                       | 37.8                                | +0.4                       | 64       | 19    | 20      | 13    | 24                    |
| Lewisburg, .....              | Union, .....        | 450              | 28                       | 40.3                                | +1.4                       | 64       | 19    | 22      | 13    | 31                    |
| Lock Haven, .....             | Clinton, .....      | 560              | 12                       | 41.8                                | +0.3                       | 66       | 19    | 21      | 13    | 29                    |
| Lycippus, .....               | Westmoreland, ..... | 1,420            | 7                        | 42.7                                | +0.1                       | 61       | 19    | 23      | 27    | 27                    |
| Mauch Chunk, .....            | Carbon, .....       | 550              | 10                       | 41.2                                | +0.7                       | 62       | 19    | 21      | 14    | 30                    |
| Philadelphia, .....           | Philadelphia, ..... | 117              | 28                       | 46.3                                | +1.3                       | 65       | 11    | 29      | 13    | 24                    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120              | 9                        | 46.9                                | +1.4                       | 64       | 11    | 29      | 13    | 21                    |
| Pittsburgh, .....             | Allegheny, .....    | 842              | 29                       | 46.0                                | +4.0                       | 68       | 18    | 28      | 26    | 25                    |
| Quakertown, .....             | Bucks, .....        | 536              | 25                       | 42.0                                | +1.3                       | 61       | 11    | 23      | 14    | 30                    |
| Reading 2, .....              | Berks, .....        | 280              | 26                       | 40.3                                | -2.2                       | .....    | ..... | .....   | ..... | .....                 |
| Reedsville, .....             | Mifflin, .....      | .....            | .....                    | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| Renovo, .....                 | Clinton, .....      | 672              | .....                    | 40.5                                | .....                      | 61       | 19    | 18      | 14    | 27                    |
| Saegertown, .....             | Crawford, .....     | 1,200            | 8                        | 42.0                                | +4.2                       | 65       | 17    | 19      | 11    | 36                    |
| Scranton, .....               | Lackawanna, .....   | 746              | .....                    | 39.8                                | .....                      | 59       | 19    | 20      | 14    | 26                    |
| Selinsgrove, .....            | Snyder, .....       | 455              | 11                       | 40.8                                | -0.8                       | 64       | 19    | 22      | 13    | 29                    |
| Shingle House, .....          | Potter, .....       | 1,475            | .....                    | 37.8                                | .....                      | 56       | 17    | 8       | 12    | 34                    |
| Smethport, .....              | McKean, .....       | 1,500            | 10                       | 38.4                                | +1.4                       | 57       | 19    | 16      | 13    | 34                    |
| Somerset, .....               | Somerset, .....     | 2,250            | 43                       | 41.2                                | +2.6                       | 60       | 19    | 19      | 7     | 37                    |
| South Bethlehem, .....        | Northampton, .....  | 339              | 9                        | .....                               | .....                      | .....    | ..... | .....   | ..... | .....                 |
| South Eaton, .....            | Wyoming, .....      | 660              | 10                       | 39.8                                | -0.3                       | 64       | 19    | 20      | 14    | 28                    |
| State College, .....          | Centre, .....       | 1,191            | 12                       | 40.2                                | +0.4                       | 60       | 19    | 22      | 13    | 24                    |
| St. Marys, .....              | Elk, .....          | 1,740            | .....                    | 38.2                                | .....                      | 54       | 18    | 17      | 13    | 30                    |
| Swarthmore, .....             | Delaware, .....     | 190              | 11                       | 43.0                                | .....                      | 61       | 11    | 26      | 26    | 23                    |
| Swiftwater, .....             | Monroe, .....       | 1,600            | .....                    | 36.7                                | .....                      | 56       | 19    | 17      | 14    | 24                    |
| Towanda, .....                | Bradford, .....     | 764              | .....                    | 39.0                                | .....                      | 61       | 20    | 20      | 14    | 28                    |
| Uniontown, .....              | Fayette, .....      | 681              | 12                       | 45.6                                | +1.8                       | 64       | 18    | 26      | 18    | 30                    |
| Warren, .....                 | Warren, .....       | 1,137            | 11                       | 42.8                                | .....                      | 57       | 22    | 18      | 13    | 32                    |
| Wellsboro, .....              | Tioga, .....        | 1,327            | 21                       | 40.2                                | +3.0                       | 62       | 19    | 22      | 14    | 29                    |

|                     |                 |       |       |       |       |       |       |       |       |       |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| West Chester, ..... | Chester, .....  | 455   | 45    | 44.3  | +1.6  | 63    | 11    | 26    | 13    | 23    |
| Westtown, .....     | Chester, .....  | 350   | 11    | 42.9  | ..... | 62    | 11    | 23    | 14    | 27    |
| White Haven, .....  | Luzerne, .....  | 1,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, ..... | Luzerne, .....  | 575   | 15    | 40.8  | +0.6  | 61    | 19    | 24    | 14    | 26    |
| Williamsport, ..... | Lycoming, ..... | 530   | 10    | 40.2  | +1.0  | 63    | 19    | 25    | 15    | 29    |
| York, .....         | York, .....     | 385   | 12    | 41.3  | -1.1  | 62    | 19    | 20    | 13    | 32    |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

Climatological Data for Pennsylvania, November, 1899—Continued.

| Stations.                | Counties.     | Precipitation, in inches. |                            |                       |                             |                    | Sky.               |       |                            | Prevailing direction of wind. | Observers.             |
|--------------------------|---------------|---------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------------|-------|----------------------------|-------------------------------|------------------------|
|                          |               | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (un-melted). | Number rainy days. | Number clear days. |       | Number partly cloudy days. |                               |                        |
|                          |               |                           |                            |                       |                             |                    | Number clear days. |       |                            |                               |                        |
| Altoona.                 | Blair.        | 2.89                      | +0.27                      | 1.42                  | .....                       | 8                  | .....              | ..... | .....                      | NW                            | Dr. C. B. Dudley.      |
| Aqueduct.                | Perry.        | 3.07                      | -0.35                      | 1.88                  | .....                       | 8                  | .....              | 11    | .....                      | N                             | Richard Callin.        |
| Athens.                  | Bradford.     | 3.26                      | .....                      | 1.55                  | 2.4                         | 7                  | .....              | 11    | .....                      | SW                            | F. L. Estabrook.       |
| Butler.                  | Butler.       | 2.01                      | .....                      | 0.50                  | 0.1                         | 10                 | .....              | 14    | .....                      | SW                            | Charles A. Donnel.     |
| Carlisle.                | Cumberland.   | 2.27                      | -1.15                      | 0.89                  | .....                       | 7                  | .....              | 10    | .....                      | NW                            | J. E. Pague.           |
| Cassandra.               | Cambria.      | 3.19                      | .....                      | 1.29                  | T                           | 8                  | .....              | 14    | .....                      | NW                            | A. H. Boyle.           |
| Center Hall.             | Centre.       | 1.96                      | .....                      | 0.61                  | 1.0                         | 5                  | .....              | 2     | .....                      | .....                         | Fred. Kurtz.           |
| Chambersburg.            | Franklin.     | 2.15                      | -0.99                      | 0.88                  | .....                       | 6                  | .....              | 8     | .....                      | W                             | J. C. Boggs.           |
| Coatesville.             | Chester.      | 2.38                      | -1.94                      | 0.92                  | .....                       | 8                  | .....              | 7     | .....                      | S                             | W. T. Gordon.          |
| Confluence.              | Somerset.     | 3.90                      | -0.71                      | 1.57                  | .....                       | 12                 | .....              | 3     | .....                      | .....                         | Dr. M. Tannehill.      |
| Coopersburg.             | Lehigh.       | 2.20                      | -2.01                      | 0.78                  | .....                       | 6                  | .....              | 15    | .....                      | NW                            | Dr. M. H. Boye.        |
| Derry Station.           | Westmoreland. | 4.25                      | .....                      | 1.69                  | .....                       | 10                 | .....              | 9     | .....                      | E                             | D. M. Wineman.         |
| Dushore.                 | Sullivan.     | 2.84                      | .....                      | 1.16                  | 5.8                         | 4                  | .....              | 6     | .....                      | SW                            | C. E. Molyneux.        |
| Dyberry.                 | Wayne.        | 2.36                      | -0.88                      | 0.97                  | 4.0                         | 6                  | .....              | 8     | .....                      | NW                            | Theodore Day.          |
| Easton.                  | Northampton.  | 2.47                      | -1.35                      | 0.96                  | 1.5                         | 6                  | .....              | 12    | .....                      | .....                         | Prof. J. W. Moore.     |
| Emporium.                | Cameron.      | 2.86                      | -0.74                      | 0.78                  | 1.6                         | 9                  | .....              | 9     | .....                      | W                             | T. B. Lloyd.           |
| Ephrata.                 | Lancaster.    | 3.40                      | .....                      | 1.64                  | .....                       | 5                  | .....              | 15    | .....                      | W                             | W. L. Frantz.          |
| Erie.                    | Erie.         | 1.31                      | -1.26                      | 0.61                  | .....                       | 10                 | .....              | 1     | .....                      | SW                            | U. S. Weather Bureau.  |
| Everett c.               | Bedford.      | 1.40                      | .....                      | 0.80                  | .....                       | 4                  | .....              | 14    | .....                      | W                             | F. I. Baker.           |
| Forks of Neshaminy 1. b. | Bucks.        | 2.26                      | -2.21                      | 0.82                  | .....                       | 8                  | .....              | 12    | .....                      | NW                            | J. C. Hillsman.        |
| Franklin.                | Venango.      | 0.61                      | -2.81                      | 0.35                  | .....                       | 2                  | .....              | 11    | .....                      | W                             | Venango Water Co.      |
| Gramplan.                | Clearfield.   | 2.31                      | -0.86                      | 0.84                  | .....                       | 7                  | .....              | 2     | .....                      | SW                            | Nathan Moore.          |
| Greensboro.              | Greene.       | 3.72                      | +0.24                      | 1.22                  | 7                           | 12                 | .....              | 13    | .....                      | W                             | Grant Kramer.          |
| Hamburg.                 | Berks.        | 3.15                      | -1.46                      | 1.40                  | .....                       | 5                  | .....              | 8     | .....                      | W                             | Jacob Wunch.           |
| Hamlington.              | Wayne.        | 2.99                      | -0.65                      | 0.80                  | 0.5                         | 10                 | .....              | 7     | .....                      | NW                            | T. B. Orchard, M. D.   |
| Harrisburg.              | Dauphin.      | 2.13                      | -0.78                      | 0.62                  | .....                       | 8                  | .....              | 8     | .....                      | NW                            | U. S. Weather Bureau.  |
| Hawley.                  | Wayne.        | 2.32                      | .....                      | 1.02                  | 3.0                         | 3                  | .....              | 6     | .....                      | W                             | L. G. Brandhurst.      |
| Hawthorn.                | Clarton.      | 2.20                      | .....                      | 0.51                  | T                           | 8                  | .....              | 7     | .....                      | W                             | C. E. Sayres, M. D.    |
| Huntingdon.              | Huntingdon.   | 3.32                      | +0.06                      | 1.74                  | .....                       | 10                 | .....              | 11    | .....                      | W                             | Prof. W. J. Swigart.   |
| Indiana.                 | Indiana.      | .....                     | .....                      | .....                 | .....                       | .....              | .....              | ..... | .....                      | .....                         | Prof. C. B. Roberston. |
| Irwin.                   | Westmoreland. | .....                     | .....                      | .....                 | .....                       | .....              | .....              | ..... | .....                      | .....                         | J. B. Gallagher.       |
| Johnstown.               | Cambria.      | 4.26                      | +0.92                      | 0.98                  | T                           | 14                 | .....              | 3     | .....                      | SW                            | E. C. Lorents.         |



|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 2.12  | -2.14 | 0.65  | ..... | 7     | 15    | 9     | 6     | N     | B. P. Kirk.             |
| Lancaster b, .....            | Lancaster, .....    | 1.55  | ..... | 0.60  | ..... | 6     | 18    | 5     | 7     | NW    | Prof. F. Gardiner.      |
| Lawrenceville e, .....        | Tioga, .....        | ..... | ..... | 3.00  | 3.0   | 2     | 23    | 0     | 7     | W     | C. P. Darling, C. E.    |
| Lebanon, .....                | Lebanon, .....      | 2.59  | -1.54 | 0.71  | T     | 9     | 12    | 9     | 9     | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 3.64  | +0.62 | 1.50  | 6.0   | 12    | 5     | 6     | 19    | SW    | G. W. T. Warburton.     |
| Lewisburg, .....              | Union, .....        | 2.88  | -0.10 | 0.97  | 0.65  | 5     | 6     | 13    | 13    | W     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 2.98  | -0.37 | 1.09  | 1.6   | 8     | 6     | 15    | 9     | W     | Prof. J. A. Robb.       |
| Lyclippus, .....              | Westmoreland, ..... | 1.74  | -1.31 | 0.63  | ..... | 10    | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 2.28  | -2.49 | 0.79  | 3.0   | 5     | 15    | 6     | 9     | N     | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 1.92  | -1.44 | 0.58  | ..... | 7     | 14    | 5     | 11    | NW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 2.03  | -2.15 | 0.80  | T     | 8     | 14    | 6     | 10    | NW    | John Comly.             |
| Pittsburgh, .....             | Allegheny, .....    | 2.12  | -0.52 | 0.70  | T     | 12    | 6     | 13    | 11    | N     | U. S. Weather Bureau.   |
| Quakertown, .....             | Bucks, .....        | 2.98  | -0.53 | 0.76  | T     | 9     | 6     | 13    | 11    | NW    | J. L. Heacock.          |
| Reading 2, .....              | Berks, .....        | 2.76  | -1.07 | 0.77  | ..... | 10    | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedville, .....              | Mifflin, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. K. McDonald.         |
| Renovo, .....                 | Clinton, .....      | 3.93  | ..... | 1.45  | 1.4   | 9     | 10    | 12    | 8     | ..... | Fred. C. Eyster.        |
| Saegerstown, .....            | Crawford, .....     | 2.05  | -2.97 | 0.63  | ..... | 6     | 1     | 8     | 21    | NW    | J. G. Apple.            |
| Scranton, .....               | Lackawanna, .....   | 2.11  | ..... | 0.65  | 5.0   | 6     | 9     | 5     | 16    | W     | H. E. Paine.            |
| Sellingrove, .....            | Snyder, .....       | 3.26  | -0.74 | 1.08  | 0.5   | 8     | 5     | 17    | 8     | N     | J. M. Boyer, C. E.      |
| Shingle House, .....          | Potter, .....       | 1.42  | ..... | 0.70  | 1.0   | 4     | 7     | 7     | 16    | SW    | Dr. W. H. Tassell.      |
| Smethport, .....              | McKean, .....       | 1.88  | -1.71 | 0.50  | T     | 7     | 11    | 7     | 12    | SW    | Armstrong & Brownell.   |
| Somerset, .....               | Somerset, .....     | 2.21  | -1.49 | 0.80  | 0.5   | 8     | 2     | 13    | 15    | NW    | W. M. Schrock.          |
| South Bethlehem, .....        | Northampton, .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | C. W. Bachert.          |
| South Eaton, .....            | Wyoming, .....      | 2.71  | -0.30 | 0.61  | 4.5   | 7     | 7     | 10    | 13    | NW    | B. M. Hall.             |
| State College, .....          | Centre, .....       | 3.06  | -0.05 | 1.29  | T     | 9     | 7     | 18    | 5     | W     | Prof. Wm. Frear.        |
| St. Marys, .....              | Elk, .....          | 3.17  | ..... | 1.08  | ..... | 7     | 7     | 8     | 15    | ..... | Wm. E. Wittman.         |
| Swarthmore, .....             | Delaware, .....     | 2.20  | ..... | 0.80  | ..... | 6     | 7     | 13    | 5     | NW    | Prof. S. J. Cunningham. |
| Swiftwater, .....             | Monroe, .....       | 2.53  | ..... | 0.98  | 5.0   | 4     | 10    | 7     | 7     | NW    | Richard Slee, M. D.     |
| Towanda, .....                | Bradford, .....     | 3.39  | ..... | 1.25  | 4.5   | 11    | 6     | 10    | 14    | E     | Hiram E. Bull, C. E.    |
| Uniontown, .....              | Fayette, .....      | 3.18  | ..... | 1.12  | ..... | 9     | 12    | 5     | 13    | N     | Wm. Hunt.               |
| Warren, .....                 | Warren, .....       | 1.92  | -0.75 | 0.55  | ..... | 8     | 9     | 6     | 15    | SW    | James K. Simpson.       |
| Wellsboro, .....              | Tioga, .....        | 2.60  | -2.30 | 1.10  | 6.0   | 5     | 6     | 5     | 19    | N     | H. D. Deming.           |
| West Chester, .....           | Chester, .....      | 2.60  | -0.55 | 0.89  | ..... | 9     | 17    | 1     | 12    | W     | J. C. Green, D. D. S.   |
| Westtown, .....               | Chester, .....      | 2.92  | -1.48 | 0.75  | ..... | 8     | 19    | 6     | 5     | NW    | J. W. Hutton.           |
| White Haven, .....            | Luzerne, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Geo. R. Rogers.         |
| Wilkes-Barre, .....           | Luzerne, .....      | 2.70  | -0.91 | 0.76  | 4.0   | 4     | 7     | 4     | 19    | S     | A. W. Betterly, M. D.   |
| Williamsport, .....           | Lycoming, .....     | 2.13  | -0.62 | 0.75  | 3.0   | 4     | 11    | 9     | 10    | W     | G. D. Snyder, C. E.     |
| York, .....                   | York, .....         | 3.59  | +0.02 | 1.80  | ..... | 7     | 16    | 9     | 5     | W     | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## DECEMBER, 1899—CLIMATOLOGY OF THE MONTH.

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### Atmospheric Pressure.

The mean pressure for the month, 30.10 inches, is .02 below the normal. At the United States Weather Bureau stations the highest observed was 30.66 inches, at Philadelphia, on the 16th, and the lowest, 29.10 inches, at Philadelphia, on the 24th.

### Temperature.

The means of the daily maximum and minimum temperatures, 39.8 and 23.2 degrees respectively, give a monthly mean of 31.5, which is 0.3 degrees above the normal, and 1.7 degrees above the corresponding month of 1898.

The average daily range was 16.6 degrees.

The highest monthly mean was 38.6 degrees, at Philadelphia (Centennial avenue).

The lowest monthly mean was 26.4 degrees, at Lawrenceville.

The highest temperature recorded during the month was 73 degrees, on the 12th, at Lancaster.

The lowest temperature was minus 11 degrees, on the 30th at Smethport.

The greatest local monthly range was 67 degrees, at Emporium and Lancaster.

The least local monthly range was 51 degrees, at Warren.

The greatest daily range was 40 degrees, at Hawthorn.

### Precipitation.

The average precipitation for the month, 3.04 inches, is 0.18 of an inch less than the normal.

The largest totals of rainfall and melted snow, in inches, were: Warren, 6.00; Saegerstown, 5.30; Dushore, 5.09; Oil City, 4.85; Emporium, 4.80; Williamsport, 4.63. The least were: York, 1.18; Shawmont, 1.35; Bethlehem, 1.37; Philadelphia, 1.41; Ephrata, 1.56; Browsers Lock, 1.63.

### Wind and Weather.

The prevailing wind was from the west.

Average number of rainy days, 10; clear, 10; partly cloudy, 10; cloudy, 11.



**TOTAL PRECIPITATION**

**4**

**3**

**3**

**3**

**SCALE OF SHADES**



**Less than 2**



**2 to 3**



**3 or more**

N, DECEMBER, 1899.

2

2

3, IN INCHES.





The following table contains the average precipitation and mean temperature for the State, also the highest and lowest temperature, with dates and location of occurrence, for the month of December, from 1887 to 1899 inclusive:

| Year.       | Precipitation. | Temperature. |          |       |                     |         |       |                |
|-------------|----------------|--------------|----------|-------|---------------------|---------|-------|----------------|
|             |                | Mean.        | Highest. | Date. | Station.            | Lowest. | Date. | Station.       |
| 1887,.....  | 3.53           | 31.5         | 65       | 4     | Unlontown, .....    | .....   | ..... | .....          |
| 1888,.....  | 3.14           | 32.5         | 62       | 26    | Pittsburgh, .....   | -6      | 31    | Dyberry.       |
| 1889,.....  | 2.77           | 39.3         | 73       | 25    | Center Valley, .... | -10     | 22    | Columbus.      |
| 1890,.....  | 3.97           | 27.2         | 59       | 11    | Charlesville, ..... | 0       | 4     | Le Roy.        |
| 1891,.....  | 4.09           | 38.6         | 68       | 5     | Meadville, .....    | -11     | 29    | Dyberry.       |
| 1892,.....  | 1.69           | 27.8         | 70       | 7     | Pittsburgh, .....   | -3      | 18    | Somerset.      |
| 1893,.....  | 3.06           | 32.2         | 70       | 24    | Easton, .....       | -13     | 27    | Ligonier.      |
| 1894,.....  | 3.95           | 32.4         | 66       | 17    | Lycippus, .....     | -7      | 14    | Dyberry.       |
| 1895,.....  | 3.22           | 34.2         | 70       | 21    | Shingle House, .... | -28     | 29    | Wellsboro.     |
| 1896,.....  | 1.20           | 30.6         | 67       | 13    | Irwin, .....        | -10     | 14    | Hollidaysburg. |
| 1897,.....  | 3.96           | 33.0         | 73       | 9     | Cannonsburg, ....   | -13     | 23    | Dyberry.       |
| 1898,.....  | 2.98           | 29.8         | 68       | 30    | Warren, .....       | -6      | 23    | Franklin.      |
| 1899,.....  | 3.04           | 31.5         | 73       | 12    | Lancaster, .....    | -11     | 14    | Dyberry.       |
| 1900, ..... | .....          | .....        | .....    | ..... | .....               | -11     | 30    | Smethport.     |

Climatological Data for Pennsylvania, December, 1899.

| Stations.                   | Counties.           | Elevation, feet. | Length of record, years. | Temperature, in Degrees Fahrenheit. |                            |          |       |         | Greatest daily range. |
|-----------------------------|---------------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-----------------------|
|                             |                     |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. |                       |
| Altoona, .....              | Blair, .....        | 1,181            | 12                       | 29.9                                | -2.5                       | 59       | 12    | 0       | 21                    |
| Aqueduct, .....             | Perry, .....        | 367              | 11                       | 35.2                                | +1.1                       | 66       | 12    | 3       | 21                    |
| Athens, .....               | Bradford, .....     | 768              | .....                    | 30.4                                | .....                      | 61       | 12    | -1      | 20                    |
| Butler, .....               | Butler, .....       | .....            | .....                    | 29.4                                | .....                      | 60       | 12    | 1       | 27                    |
| Carlisle, .....             | Cumberland, .....   | 480              | 52                       | .....                               | .....                      | .....    | ..... | .....   | 27                    |
| Cassandra, .....            | Cambria, .....      | 2,100            | .....                    | 30.3                                | .....                      | 56       | 11    | 4       | 24                    |
| Center Hall, .....          | Centre, .....       | 1,100            | .....                    | 31.6                                | .....                      | 57       | 12    | 2       | 29                    |
| Chambersburg, .....         | Franklin, .....     | 1,000            | 37                       | 32.6                                | -1.1                       | 63       | 12    | 5       | 27                    |
| Coatesville, .....          | Chester, .....      | 380              | 12                       | 35.0                                | +1.4                       | 67       | 12    | 2       | 33                    |
| Confluence, .....           | Somerset, .....     | 1,324            | 25                       | 29.2                                | .....                      | 62       | 1     | -1      | 29                    |
| Coopersburg, .....          | Lehigh, .....       | 1,520            | 10                       | 36.4                                | +2.2                       | 64       | 12    | 6       | 31                    |
| Derry Station, .....        | Westmoreland, ..... | 1,172            | .....                    | 32.4                                | .....                      | 61       | 13    | 3       | 29                    |
| Dushore, .....              | Sullivan, .....     | 1,590            | .....                    | 28.2                                | .....                      | 58       | 12    | -1      | 30                    |
| Dyberry, .....              | Wayne, .....        | 1,100            | 35                       | 28.2                                | +2.9                       | 60       | 12    | -2      | 31                    |
| Easton, .....               | Northampton, .....  | 325              | 16                       | 34.1                                | +2.1                       | 62       | 12    | 3       | 31                    |
| Emporium, .....             | Cameron, .....      | 1,050            | 12                       | 28.6                                | -2.5                       | 60       | 12    | -7      | 30                    |
| Ephrata, .....              | Lancaster, .....    | .....            | .....                    | 43.7                                | .....                      | 65       | 12    | 4       | 33                    |
| Erie, .....                 | Erie, .....         | 1,400            | 26                       | 31.8                                | +0.8                       | 62       | 12    | 4       | 27                    |
| Everett, .....              | Bedford, .....      | 1,060            | .....                    | 30.8                                | .....                      | 59       | 12    | 4       | 26                    |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 374              | 11                       | 33.8                                | -1.7                       | .....    | ..... | .....   | 34                    |
| Franklin, .....             | Venango, .....      | 955              | 24                       | 30.4                                | .....                      | 60       | 12    | -1      | 37                    |
| Greensburg, .....           | Clearfield, .....   | 1,450            | 36                       | 27.7                                | +0.8                       | 56       | 11    | -2      | 34                    |
| Greensboro, .....           | Greene, .....       | 768              | 11                       | .....                               | .....                      | 64       | 11    | .....   | .....                 |
| Hamburg, .....              | Berks, .....        | 380              | 9                        | 37.8                                | .....                      | 63       | 12    | 6       | 23                    |
| Hamlington, .....           | Wayne, .....        | 1,600            | 11                       | 29.0                                | +0.3                       | 57       | 12    | -3      | 28                    |
| Harrisburg, .....           | Dauphin, .....      | 361              | 11                       | 34.3                                | +0.3                       | 62       | 12    | 7       | 21                    |
| Hawley, .....               | Wayne, .....        | .....            | .....                    | 27.4                                | .....                      | 60       | 12    | -3      | 35                    |
| Hawthorn, .....             | Clarion, .....      | .....            | .....                    | 30.2                                | .....                      | 60       | 12    | 1       | 40                    |
| Huntingdon, .....           | Huntingdon, .....   | 650              | 12                       | 33.2                                | -0.3                       | 63       | 12    | 8       | 26                    |
| Indiana, .....              | Indiana, .....      | 1,350            | 6                        | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| Irwin, .....                | Westmoreland, ..... | 1,384            | .....                    | .....                               | .....                      | .....    | ..... | .....   | .....                 |
| Johnstown, .....            | Cambria, .....      | 1,184            | 13                       | 31.8                                | -2.8                       | 60       | 12    | 4       | 32                    |



|                               | 775   | 10 | 35.4 | +1.3  | 65 | 11 | 3     | 31 | 23 |
|-------------------------------|-------|----|------|-------|----|----|-------|----|----|
| Kennett Square, .....         | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lancaster, .....              | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lawrenceville, .....          | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lebanon, .....                | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Le Roy, .....                 | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lewisburg, .....              | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lock Haven, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Lycippus, .....               | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Mauch Chunk, .....            | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Philadelphia, .....           | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| 1529 Centennial avenue, ..... | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Pittsburgh, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Quakertown, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Reading, .....                | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Reedsville, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Renovo, .....                 | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Saegertown, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Scranton, .....               | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Selinsgrove, .....            | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Shingle House, .....          | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Smithport, .....              | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Somerset, .....               | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| South Bethlehem, .....        | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| South Eaton, .....            | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| State College, .....          | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| St. Marys, .....              | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Swarthmore, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Swiftwater, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Towanda, .....                | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Uniontown, .....              | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Warren, .....                 | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Wellsville, .....             | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| West Chester, .....           | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Westtown, .....               | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| White Haven, .....            | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Wilkes-Barre, .....           | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| Williamsport, .....           | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |
| York, .....                   | 1,006 | 12 | 35.4 | ..... | 73 | 13 | ..... | 30 | 29 |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 8 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2. The absence of the mean temperature has been obtained from daily readings of the maximum and minimum thermometers. A roman letter for instance, "n" (for instance, "n") All records are normals. \*Observed reading.

means; but State departures are determined by comparison of current data of only such stations as have

## Climatological Data for Pennsylvania, December, 1899—Continued.

| Stations.                   | Counties.           | Precipitation, in inches. |                            |                       |                            | Sky.               |                    |                            | Prevailing direction of wind. | Observers.             |
|-----------------------------|---------------------|---------------------------|----------------------------|-----------------------|----------------------------|--------------------|--------------------|----------------------------|-------------------------------|------------------------|
|                             |                     | Total.                    | Departure from the normal. | Greatest in 24 hours. | Total snowfall (unmelted). | Number rainy days. | Number clear days. | Number partly cloudy days. | Number cloudy days.           |                        |
| Altoona, .....              | Blair, .....        | 2.70                      | +0.08                      | 1.02                  | .....                      | 12                 | 14                 | 7                          | 20                            | Dr. C. B. Dudley.      |
| Aqueduct, .....             | Perry, .....        | 2.45                      | -0.21                      | 1.45                  | 0.6                        | 7                  | 12                 | .....                      | 10                            | Richard Callin.        |
| Athens, .....               | Bradford, .....     | 2.57                      | .....                      | 1.10                  | 1.2                        | 9                  | 12                 | 4                          | 9                             | F. L. Estabrook.       |
| Butler, .....               | Butler, .....       | 4.19                      | .....                      | 0.82                  | 9.2                        | 15                 | 6                  | 6                          | 19                            | Charles A. Donnel.     |
| Carlisle, .....             | Cumberland, .....   | 2.77                      | +0.04                      | 1.52                  | 0.2                        | 8                  | 8                  | 14                         | 9                             | J. E. Fague.           |
| Cassandra, .....            | Cambria, .....      | 3.53                      | .....                      | 0.83                  | 12.0                       | 11                 | 3                  | 11                         | 17                            | A. H. Boyle.           |
| Center Hall, .....          | Centre, .....       | 2.87                      | .....                      | 1.61                  | 3.0                        | 7                  | 11                 | 14                         | 13                            | Fred. Kurta.           |
| Chambersburg, .....         | Franklin, .....     | 2.47                      | +0.51                      | 1.34                  | 0.1                        | 7                  | 6                  | 14                         | 11                            | J. C. Boggs.           |
| Coatesville, .....          | Chester, .....      | 2.16                      | 1.90                       | 0.82                  | 0.5                        | 7                  | 12                 | 15                         | 4                             | W. T. Gordon.          |
| Confluence, .....           | Somerset, .....     | 3.22                      | -0.20                      | 0.94                  | 6.9                        | 11                 | 5                  | 7                          | 19                            |                        |
| Coopersburg, .....          | Lehigh, .....       | 1.69                      | -1.94                      | 0.56                  | 0.2                        | 7                  | 14                 | 22                         | 5                             |                        |
| Derry Station, .....        | Westmoreland, ..... | 3.27                      | .....                      | 0.85                  | 4.5                        | 12                 | 10                 | 10                         | 11                            |                        |
| Dushore, .....              | Sullivan, .....     | 5.09                      | .....                      | 1.80                  | 4.6                        | 9                  | 11                 | 4                          | 16                            |                        |
| Dyberry, .....              | Wayne, .....        | 1.95                      | -0.36                      | 0.69                  | 1.0                        | 7                  | 5                  | 19                         | 7                             |                        |
| Easton, .....               | Northampton, .....  | 2.04                      | -1.63                      | 0.78                  | 0.5                        | 9                  | 12                 | 9                          | 10                            | Prof. J. W. Moore.     |
| Emporium, .....             | Cameron, .....      | 4.80                      | +1.60                      | 1.30                  | 11.5                       | 11                 | 9                  | 12                         | 8                             | T. B. Lloyd.           |
| Ephrata, .....              | Lancaster, .....    | 1.56                      | .....                      | 0.56                  | 0.5                        | 7                  | 15                 | 20                         | 23                            | W. L. Frantz.          |
| Erie, .....                 | Frie, .....         | 4.22                      | +0.69                      | 0.96                  | .....                      | 12                 | 1                  | 7                          | 4                             | U. S. Weather Bureau.  |
| Everett, .....              | Bedford, .....      | .....                     | .....                      | 1.40                  | .....                      | .....              | 14                 | 13                         | 1                             | F. I. Baker.           |
| Forks of Neshaminy 1, ..... | Bucks, .....        | 2.57                      | -0.30                      | 1.06                  | .....                      | 7                  | 12                 | 6                          | 13                            | J. C. Hillsman.        |
| Franklin, .....             | Venango, .....      | 2.77                      | +0.28                      | 1.16                  | 9.0                        | 7                  | 12                 | 10                         | 7                             | Venango Water Co.      |
| Grampian, .....             | Clearfield, .....   | 3.50                      | +0.31                      | 1.15                  | 16.0                       | 11                 | 14                 | 11                         | 16                            | Nathan Moore.          |
| Greensburg, .....           | Greene, .....       | 2.53                      | +0.68                      | 1.10                  | 3.0                        | 13                 | 11                 | 2                          | 15                            | Grant Kramer.          |
| Hamburg, .....              | Berks, .....        | 2.75                      | -0.79                      | 0.90                  | 0.6                        | 7                  | 7                  | 15                         | 11                            | Jacob Wunch.           |
| Hamilton, .....             | Wayne, .....        | 2.76                      | -0.92                      | 0.75                  | 8.6                        | 11                 | 4                  | 3                          | 24                            | T. B. Orchard, M. D.   |
| Harrisburg, .....           | Dauphin, .....      | 1.93                      | -0.60                      | 1.06                  | .....                      | 9                  | 8                  | 13                         | 10                            | U. S. Weather Bureau.  |
| Hawley, .....               | Wayne, .....        | 2.69                      | .....                      | 1.12                  | 0.4                        | 6                  | 3                  | 15                         | 13                            | L. G. Brandhurst.      |
| Hawthorn, .....             | Clarion, .....      | 4.25                      | .....                      | 1.00                  | 5.5                        | 12                 | 0                  | 16                         | 16                            | C. E. Baynes, M. D.    |
| Huntingdon, .....           | Huntingdon, .....   | 3.10                      | +0.38                      | 1.29                  | 1.5                        | 7                  | 11                 | 11                         | 9                             | Prof. W. J. Swigart.   |
| Indiana, .....              | Indiana, .....      | .....                     | .....                      | .....                 | .....                      | .....              | .....              | .....                      | .....                         | Prof. C. B. Robertson. |
| Irwin, .....                | Westmoreland, ..... | .....                     | .....                      | .....                 | .....                      | .....              | .....              | .....                      | .....                         | J. B. Gallagher.       |
| Johnstown, .....            | Cambria, .....      | 4.25                      | +0.38                      | 0.96                  | 7.3                        | 19                 | 6                  | 10                         | 16                            | E. C. Lorentz.         |

|                               |                     |       |       |       |       |       |       |       |       |       |                         |
|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| Kennett Square, .....         | Chester, .....      | 2.35  | -0.72 | 0.94  | 0.5   | 6     | 12    | 14    | 5     | NW    | B. P. Kirk.             |
| Lancaster c. ....             | Lancaster, .....    | 2.60  | ..... | 0.75  | 4.5   | ..... | 17    | 4     | 7     | NW    | Prof. F. Gardiner.      |
| Lawrenceville, .....          | Tloga, .....        | 1.75  | ..... | 0.58  | 0.4   | 5     | 22    | 3     | 6     | W     | C. P. Darling.          |
| Lebanon, .....                | Lebanon, .....      | 4.47  | -1.44 | 1.75  | 5.8   | 11    | 11    | 14    | 6     | SW    | G. W. Hayes, C. E.      |
| Le Roy, .....                 | Bradford, .....     | 3.98  | +1.58 | 1.54  | ..... | 13    | 7     | 9     | 15    | SW    | G. W. T. Warburton.     |
| Lewisburg a, .....            | Union, .....        | 3.61  | +1.02 | 1.40  | T     | 8     | 5     | 12    | 13    | W     | Prof. W. G. Owen.       |
| Lock Haven, .....             | Clinton, .....      | 3.22  | +0.41 | 0.91  | 5.5   | 8     | 5     | 15    | 11    | W     | Prof. J. A. Robb.       |
| Lycippus, .....               | Westmoreland, ..... | 2.95  | -0.35 | 1.18  | 6.4   | 17    | ..... | ..... | ..... | ..... | Murray Forbes.          |
| Mauch Chunk, .....            | Carbon, .....       | 1.41  | -0.47 | 0.63  | 0.2   | 7     | 17    | 7     | 7     | N     | F. C. Wintermute.       |
| Philadelphia, .....           | Philadelphia, ..... | 1.44  | -1.33 | 0.59  | 0.5   | 7     | 14    | 10    | 7     | NW    | U. S. Weather Bureau.   |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 2.24  | -1.80 | 0.71  | 0.5   | 8     | 13    | 13    | 5     | NW    | John Comly.             |
| Pittsburgh, .....             | Allegheny, .....    | 2.61  | -0.55 | 1.08  | 1.6   | 12    | 7     | 10    | 14    | NW    | U. S. Weather Bureau.   |
| Quakertown, .....             | Bucks, .....        | 2.17  | -0.91 | 0.74  | T     | 6     | 9     | 15    | 7     | SW    | J. L. Heacock.          |
| Reading 2, .....              | Berks, .....        | 3.60  | ..... | 1.50  | ..... | 14    | ..... | ..... | ..... | ..... | Franklin Yager.         |
| Reedsville, .....             | Mifflin, .....      | 5.30  | ..... | 0.70  | 3.4   | 10    | 8     | ..... | 9     | ..... | R. K. McDonald.         |
| Renovo, .....                 | Clinton, .....      | 2.10  | ..... | 0.80  | 24.3  | 15    | 2     | 14    | 22    | ..... | Fred. C. Eyster.        |
| Saegertown, .....             | Crackford, .....    | 2.61  | +2.02 | 1.10  | 1.5   | 7     | 6     | 7     | 15    | SW    | J. G. Apple.            |
| Scranton, .....               | Lackawanna, .....   | ..... | ..... | ..... | 0.5   | 9     | 5     | 10    | 5     | S     | H. E. Paine.            |
| Selinsgrove, .....            | Snyder, .....       | ..... | -0.31 | ..... | ..... | ..... | ..... | 21    | ..... | SW    | J. M. Boyer, C. E.      |
| Shingle House, .....          | Potter, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Dr. W. H. Tassell.      |
| Smethport, .....              | McKean, .....       | 3.05  | -0.60 | 1.00  | ..... | ..... | 5     | 8     | 18    | W     | Armstrong & Brownell.   |
| Somerset, .....               | Somerset, .....     | 2.51  | ..... | 1.07  | 20.6  | 13    | 0     | 11    | 20    | NW    | W. M. Schrock.          |
| South Bethlehem, .....        | Northampton, .....  | 2.53  | ..... | 1.19  | ..... | ..... | ..... | ..... | ..... | ..... | C. W. Bachert.          |
| South Eaton, .....            | Wyoming, .....      | 3.53  | +0.03 | 1.20  | T     | 8     | 14    | 9     | 8     | SW    | B. M. Hall.             |
| State College, .....          | Centre, .....       | ..... | -0.13 | ..... | 2.9   | 11    | 9     | 16    | 6     | W     | Prof. Wm. Frear.        |
| St. Marys, .....              | Elk, .....          | ..... | ..... | ..... | 7.5   | 7     | 12    | 6     | 13    | ..... | Wm. E. Wittman.         |
| Swarthmore, .....             | Delaware, .....     | ..... | ..... | ..... | 0.5   | ..... | 6     | 21    | 4     | NW    | Prof. S. J. Cunningham. |
| Swiftwater, .....             | Monroe, .....       | 2.82  | ..... | 1.18  | ..... | ..... | ..... | ..... | ..... | ..... | Richard Slee, M. D.     |
| Towanda, .....                | Bradford, .....     | 3.82  | ..... | 1.21  | 1.2   | 10    | 7     | 14    | 10    | W     | Hiram E. Bull, C. E.    |
| Uniontown, .....              | Fayette, .....      | 6.00  | +0.21 | 1.68  | 7.8   | 11    | 12    | 10    | 9     | NW    | Wm. Hunt.               |
| Warren, .....                 | Warren, .....       | 3.78  | +2.75 | 1.40  | 23.1  | 16    | 3     | 10    | 18    | SW    | James K. Simpson.       |
| Wellsboro, .....              | Tloga, .....        | 2.17  | +0.07 | 0.90  | 10.0  | 8     | 8     | 3     | 20    | WW    | H. D. Deming.           |
| West Chester, .....           | Chester, .....      | ..... | -1.53 | ..... | 0.8   | 9     | 20    | 5     | 6     | W     | J. C. Green, D. D. S.   |
| Westtown k, .....             | Chester, .....      | ..... | ..... | ..... | ..... | ..... | 13    | 3     | 4     | NW    | J. W. Hutton.           |
| White Haven, .....            | Luzerne, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Geo. R. Rogers.         |
| Wilkes-Barre, .....           | Luzerne, .....      | 1.72  | -1.83 | 0.56  | 2.0   | 5     | 17    | 6     | 8     | N     | A. W. Betterly, M. D.   |
| Williamsport, .....           | Lycoming, .....     | 4.63  | +2.24 | 1.81  | T     | 7     | 12    | 11    | 8     | W     | G. D. Snyder, C. E.     |
| York, .....                   | York, .....         | 1.18  | -1.65 | 0.60  | 1.8   | 7     | 18    | 10    | 3     | W     | Mrs. L. H. Grenewald.   |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. ÷ 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
A roman letter following the name of a station, or placed against the data in the body of the form, indicates the number of days missing from the record;  
for instance, "n" denotes 14 days missing.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.

## METEOROLOGICAL OBSERVATIONS OF THE WEATHER BUREAU.

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PENNSYLVANIA SECTION—T. F. TOWNSEND, Section Director,  
Philadelphia, Pa.

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### ANNUAL SUMMARY.

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#### January.

Mean temperature, 26.6 degrees; deficiency, 1.4 degrees. Precipitation, 3.05 inches; deficiency, 0.15 of an inch.

#### February.

Mean temperature, 22.7 degrees; deficiency, 5.9 degrees. Precipitation, 4.05 inches; excess, 1.10 inches. On the 10th and 11th unusually low temperatures occurred all over the State, and during the latter part of the 11th a severe snowstorm accompanied by high winds set in, and by the morning of the 12th railroads and trolleys were so badly blocked that transportation of all kinds was almost suspended. The storm continued with unabated energy throughout the 12th and 13th, during which time traffic was at a standstill.

#### March.

Mean temperature, 36.3 degrees; excess, 0.6 degrees. Precipitation, 4.87 inches; excess, 1.44 inches.

#### April.

Mean temperature, 50.2 degrees; excess, 2.2 degrees. Precipitation, 1.76 inches; deficiency, 1.45 inches.

#### May.

Mean temperature, 61.1 degrees; excess, 1.6 degrees. Precipitation 3.82 inches; deficiency, 0.86 of an inch.

#### June.

Mean temperature, 69.9 degrees; excess, 1.5 degrees. Precipitation, 3.51 inches; deficiency, 0.28 of an inch.



TOTAL PREC

30

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SCALE OF SE



Under 35



35 to 40



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CATION, 1899.

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ES, IN INCHES.







**July.**

Mean temperature, 72.3 degrees, excess, 1 degree. Precipitation, 3.91 inches; deficiency, 0.66 of an inch.

**August.**

Mean temperature, 71.2 degrees; excess, 1.6 degrees. Precipitation, 4.01 inches; excess, 0.33 of an inch. Droughty conditions until the 27th. Many of the rains came in downpours which quickly ran off without moistening the ground much below the surface.

**September.**

Mean temperature, 61.8 degrees; deficiency, 1.8 degrees. Precipitation, 4.70 inches; excess, 1.47 inches. Droughty conditions prevailed in some counties during the early part of the month.

**October.**

Mean temperature, 54.6 degrees; excess, 3.9 degrees. Precipitation 1.55 inches; deficiency, 1.75 inches.

**November.**

Mean temperature, 41.5 degrees; excess, 1.1 degree. Precipitation, 2.66; deficiency, 0.96 of an inch.

**December.**

Mean temperature, 31.5 degrees; excess, 0.3 degree. Precipitation, 3.04 inches; deficiency, 0.18 of an inch.

Climatological Data for the Year 1899.

| Stations.                  | Counties.           | Elevation, feet. | Temperature (Degrees Fahrenheit). |              |          |                    |         |              |
|----------------------------|---------------------|------------------|-----------------------------------|--------------|----------|--------------------|---------|--------------|
|                            |                     |                  | Length of record, years.          | Annual mean. | Highest. | Date.              | Lowest. | Date.        |
| Altoona, .....             | Blair, .....        | 1,181            | 12                                | 48.1         | 94       | June 23, .....     | -20     | February 10. |
| Aqueduct, .....            | Perry, .....        | 367              | 11                                | 53.5         | 101      | July 22, .....     | -14     | February 10. |
| Athens, .....              | Bradford, .....     | 768              | .....                             | 48.2         | 98       | June 5, .....      | -18     | February 11. |
| Butler, .....              | Butler, .....       | .....            | .....                             | .....        | 91       | June 23, .....     | -27     | February 11. |
| Carlisle, .....            | Cumberland, .....   | .....            | .....                             | .....        | 95       | July 22, .....     | -16     | February 10. |
| Cassandra, .....           | Cambria, .....      | 480              | 52                                | .....        | 89       | June 23, .....     | -16     | February 10. |
| Center Hall, .....         | Centre, .....       | 2,100            | .....                             | 48.6         | 94       | August 21, .....   | -19     | February 10. |
| Chambersburg, .....        | Franklin, .....     | 1,100            | .....                             | 49.2         | 98       | June 22, .....     | -15     | January 2.   |
| Coatesville, .....         | Chester, .....      | 1,000            | 37                                | .....        | 100      | July 22, .....     | -13     | February 10. |
| Confluence, .....          | Somerset, .....     | 1,380            | 12                                | 52.8         | .....    | .....              | -23     | February 11. |
| Coopersburg, .....         | Lehigh, .....       | 1,324            | .....                             | .....        | 91       | June 6, .....      | -15     | February 10. |
| Derry Station, .....       | Westmoreland, ..... | 520              | 10                                | 51.9         | 100      | May 1, .....       | -21     | February 11. |
| Dushore, .....             | Sullivan, .....     | 1,172            | .....                             | 52.0         | 94       | June 6, .....      | -26     | February 11. |
| Dyberry, .....             | Wayne, .....        | 1,590            | .....                             | 45.9         | .....    | .....              | -20     | February 11. |
| Easton, .....              | Northampton, .....  | 1,100            | 34                                | .....        | 95       | June 6, .....      | -12     | February 20. |
| Emporium, .....            | Cameron, .....      | 325              | 16                                | 51.3         | 93       | June 23, .....     | -28     | February 11. |
| Erle, .....                | Erle, .....         | 1,050            | 12                                | 48.0         | 91       | September 7, ..... | -20     | February 10. |
| Everett, .....             | Bedford, .....      | 1,400            | 27                                | 49.0         | 94       | August 21, .....   | -20     | February 10. |
| Forks of Neshaminy, 1..... | Bucks, .....        | 1,060            | .....                             | 50.0         | .....    | .....              | .....   | .....        |
| Franklin, .....            | Venango, .....      | 304              | 11                                | 51.6         | 94       | July 4, .....      | -13     | January 11.  |
| Grampian, .....            | Clearfield, .....   | 955              | 27                                | .....        | 92       | June 23, .....     | -24     | February 10. |
| Greensboro, .....          | Greene, .....       | 1,450            | 36                                | 47.9         | 98       | July 25, .....     | -30     | February 10. |
| Hamburg, .....             | Berks, .....        | 708              | .....                             | .....        | 98       | July 30, .....     | -13     | February 10. |
| Hamlington, .....          | Wayne, .....        | 380              | 9                                 | 52.4         | 95       | August 21, .....   | -18     | February 10. |
| Harrisburg, .....          | Dauphin, .....      | 1,600            | 11                                | 47.4         | 96       | June 6, .....      | -13     | February 10. |
| Hawley, .....              | Wayne, .....        | 361              | 12                                | 52.2         | 94       | June 24, .....     | -18     | February 15. |
| Hawthorn, .....            | Clarion, .....      | .....            | .....                             | 47.1         | 99       | July 23, .....     | -29     | February 11. |
| Huntingdon, .....          | Huntingdon, .....   | .....            | .....                             | .....        | 101      | August 21, .....   | -23     | February 11. |
| Indiana, .....             | Indiana, .....      | 650              | 12                                | 50.8         | .....    | .....              | -22     | February 10. |
| Johnstown, .....           | Cambria, .....      | 1,350            | 5                                 | .....        | 97       | July 23, .....     | -17     | February 10. |
| Kennett Square, .....      | Chester, .....      | 1,184            | 12                                | 52.0         | 98       | June 6, .....      | -13     | February 11. |
| Lawrenceville, .....       | Tioga, .....        | 275              | 10                                | 52.6         | .....    | .....              | -39     | February 11. |

|                               |                     |       |       |       |       |            |       |       |              |
|-------------------------------|---------------------|-------|-------|-------|-------|------------|-------|-------|--------------|
| Lebanon, .....                | Lebanon, .....      | 458   | 12    | 50.8  | 97    | August 20, | ..... | ..... | February 10. |
| Le Roy, .....                 | Bradford, .....     | 1,400 | 11    | 47.1  | 98    | August 21, | ..... | ..... | February 10. |
| Lewisburg, .....              | Union, .....        | 450   | 28    | 50.0  | 98    | August 14, | ..... | ..... | February 11. |
| Lock Haven, .....             | Clinton, .....      | 560   | 12    | 51.6  | 100   | August 26, | ..... | ..... | February 13. |
| Lycippus, .....               | Westmoreland, ..... | 1,420 | 7     | ..... | 95    | July 24,   | ..... | ..... | February 11. |
| Mauch Chunk, .....            | Carbon, .....       | 550   | 10    | 50.0  | 98    | June 6,    | ..... | ..... | February 10. |
| Philadelphia, .....           | Philadelphia, ..... | 117   | 28    | 54.5  | 97    | June 6,    | ..... | ..... | February 10. |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 120   | 9     | 54.8  | 98    | June 6,    | ..... | ..... | February 10. |
| Pittsburgh, .....             | Allegheny, .....    | 842   | 29    | 53.6  | 96    | August 20, | ..... | ..... | February 10. |
| Quakertown, .....             | Bucks, .....        | 536   | 25    | 50.7  | 96    | June 6,    | ..... | ..... | February 11. |
| Reading 2, .....              | Berks, .....        | 250   | 26    | 50.4  | ..... | .....      | ..... | ..... | .....        |
| Reedsville, .....             | Mifflin, .....      | 72    | ..... | ..... | 95    | August 20, | ..... | ..... | February 11. |
| Renovo, .....                 | Clinton, .....      | 1,200 | 8     | 49.9  | 96    | August 20, | ..... | ..... | February 11. |
| Saegertown, .....             | Crawford, .....     | 746   | ..... | 48.5  | 95    | August 20, | ..... | ..... | February 10. |
| Scranton, .....               | Lackawanna, .....   | 455   | 11    | 49.0  | 98    | August 21, | ..... | ..... | February 10. |
| Selinsgrove, .....            | Snyder, .....       | 1,475 | ..... | 56.5  | 96    | August 20, | ..... | ..... | February 11. |
| Shingle House, .....          | Potter, .....       | 1,500 | 10    | ..... | 98    | August 19, | ..... | ..... | February 11. |
| Smethport, .....              | McKean, .....       | 2,250 | 43    | 47.5  | 92    | August 20, | ..... | ..... | February 11. |
| Somerset, .....               | Somerset, .....     | 339   | 8     | ..... | 93    | July 23,   | ..... | ..... | February 11. |
| South Bethlehem, .....        | Northampton, .....  | 660   | 10    | 48.8  | 95    | .....      | ..... | ..... | February 10. |
| South Eaton, .....            | Wyoming, .....      | 1,191 | 12    | 49.1  | 96    | August 21, | ..... | ..... | February 10. |
| State College, .....          | Centre, .....       | 1,740 | ..... | ..... | ..... | August 20, | ..... | ..... | February 10. |
| St. Marys, .....              | Elk, .....          | 190   | 11    | ..... | 97    | July 22,   | ..... | ..... | February 10. |
| Swarthmore, .....             | Delaware, .....     | 1,600 | ..... | ..... | 89    | August 21, | ..... | ..... | .....        |
| Swiftwater, .....             | Monroe, .....       | 754   | ..... | 48.2  | 95    | August 21, | ..... | ..... | February 10. |
| Towanda, .....                | Bradford, .....     | 681   | 12    | 52.5  | 93    | June 23,   | ..... | ..... | February 10. |
| Uniontown, .....              | Fayette, .....      | 1,137 | ..... | 47.0  | 90    | June 5,    | ..... | ..... | February 11. |
| Warren, .....                 | Warren, .....       | 1,327 | 21    | 47.8  | 96    | August 20, | ..... | ..... | February 11. |
| Wellsboro, .....              | Tioga, .....        | 456   | 45    | 52.5  | 96    | July 22,   | ..... | ..... | February 10. |
| West Chester, .....           | Chester, .....      | 350   | 10    | ..... | ..... | .....      | ..... | ..... | February 11. |
| Westtown, .....               | Chester, .....      | 1,150 | ..... | ..... | 93    | June 6,    | ..... | ..... | February 11. |
| White Haven, .....            | Luzerne, .....      | 575   | 15    | 50.7  | 101   | June 6,    | ..... | ..... | February 11. |
| Wilkes-Barre, .....           | Luzerne, .....      | 530   | 10    | 50.5  | 94    | August 19, | ..... | ..... | February 11. |
| Williamsport, .....           | Lycoming, .....     | 385   | 12    | 51.3  | 96    | June 6,    | ..... | ..... | February 11. |
| York, .....                   | York, .....         | ..... | ..... | ..... | ..... | .....      | ..... | ..... | .....        |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.  
\*On other dates also.

Climatological Data for the Year 1899—Continued.

| Stations.                   | Counties.           | Precipitation (inches). |                   |                  |                |                |                 | Length of record, years. | Number rainy days. |                            |                     |  | Sky. |  | Prevailing direction of wind. |
|-----------------------------|---------------------|-------------------------|-------------------|------------------|----------------|----------------|-----------------|--------------------------|--------------------|----------------------------|---------------------|--|------|--|-------------------------------|
|                             |                     | Total for the year.     | Greatest monthly. | Month.           | Least monthly. | Month.         | Total snowfall. |                          | Number clear days. | Number partly cloudy days. | Number cloudy days. |  |      |  |                               |
|                             |                     |                         |                   |                  |                |                |                 |                          |                    |                            |                     |  |      |  |                               |
| Altoona, .....              | Blair, .....        | 38.35                   | 5.62              | May, .....       | 1.23           | October, ..... | 131             | 114                      | 118                | 133                        | NW                  |  |      |  |                               |
| Aqueduct, .....             | Perry, .....        | 40.61                   | 8.21              | August, .....    | 1.14           | April, .....   | 115             | 180                      | 101                | 84                         | SW                  |  |      |  |                               |
| Athens, .....               | Bradford, .....     | 32.53                   | 4.32              | August, .....    | 1.38           | October, ..... | 113             | 168                      | 125                | 72                         | SW                  |  |      |  |                               |
| Butler, .....               | Butler, .....       | 40.62                   | 4.78              | May, .....       | 0.79           | October, ..... | 108             | 159                      | 73                 | 183                        | W                   |  |      |  |                               |
| Carlisle, .....             | Cumberland, .....   | 38.62                   | 5.66              | May, .....       | 0.88           | April, .....   | 119             | 102                      | 113                | 156                        | NW                  |  |      |  |                               |
| Cassandra, .....            | Centre, .....       | 42.50                   | 5.03              | May, .....       | 1.23           | April, .....   | 92              | 163                      | 132                | 70                         | W                   |  |      |  |                               |
| Center Hall, .....          | Franklin, .....     | 48.27                   | 10.22             | February, .....  | 1.74           | October, ..... | 106             | 93                       | 30                 | 242                        | S                   |  |      |  |                               |
| Chambersburg, .....         | Chester, .....      | 48.91                   | 6.64              | July, .....      | 0.70           | October, ..... | 113             | 172                      | 102                | 91                         | NW                  |  |      |  |                               |
| Coatesville, .....          | Somerset, .....     | 46.89                   | 7.25              | September, ..... | 1.48           | October, ..... | 149             | 147                      | 76                 | 142                        | W                   |  |      |  |                               |
| Confluence, .....           | Lehigh, .....       | 44.73                   | 5.00              | August, .....    | 0.72           | October, ..... | 137             | 156                      | 63                 | 146                        | SW                  |  |      |  |                               |
| Coopersburg, .....          | Westmoreland, ..... | 34.27                   | 5.09              | December, .....  | 1.30           | October, ..... | 97              | 62.8                     | 105                | 129                        | NW                  |  |      |  |                               |
| Derry Station, .....        | Sullivan, .....     | 40.26                   | 6.14              | September, ..... | 0.82           | October, ..... | 106             | 145                      | 132                | 88                         | W                   |  |      |  |                               |
| Dushore, .....              | Wayne, .....        | 48.93                   | 4.89              | September, ..... | 2.21           | October, ..... | 116             | 87                       | 130                | 148                        | SW                  |  |      |  |                               |
| Dyberry, .....              | Northampton, .....  | 28.36                   | 5.35              | May, .....       | 0.07           | August, .....  | 135             | 177                      | 118                | 70                         | W                   |  |      |  |                               |
| Easton, .....               | Erle, .....         | 46.54                   | 8.16              | February, .....  | 1.72           | April, .....   | 119             | 142                      | 84                 | 139                        | N                   |  |      |  |                               |
| Emporium, .....             | Bedford, .....      | 38.79                   | 5.34              | May, .....       | 1.56           | October, ..... | 115             | 58                       | 185                | 122                        | W                   |  |      |  |                               |
| Everett, .....              | Bucks, .....        | 49.90                   | 6.30              | September, ..... | 1.14           | April, .....   | 142             | 170                      | 51                 | 144                        | SW                  |  |      |  |                               |
| Forks of Neshaminy 1, ..... | Venango, .....      | 50.90                   | 6.90              | September, ..... | 1.40           | October, ..... | 98              | 81                       | 87                 | 197                        | S                   |  |      |  |                               |
| Franklin, .....             | Greene, .....       | 40.36                   | 6.63              | February, .....  | 0.71           | October, ..... | 135             | 113                      | 123                | 129                        | W                   |  |      |  |                               |
| Gramplan, .....             | Berks, .....        | 33.98                   | 4.85              | August, .....    | 0.78           | October, ..... | 122             | 97                       | 140                | 128                        | W                   |  |      |  |                               |
| Greensboro, .....           | Wayne, .....        | 43.27                   | 6.08              | February, .....  | 1.67           | April, .....   | 85              | 119                      | 119                | 128                        | W                   |  |      |  |                               |
| Hamburg, .....              | Dauphin, .....      | 39.89                   | 5.13              | March, .....     | 1.26           | October, ..... | 119             | 78                       | 157                | 124                        | W                   |  |      |  |                               |
| Hamlington, .....           | Wayne, .....        | 46.58                   | 6.20              | May, .....       | 0.97           | October, ..... | 180             | 155                      | 124                | 86                         | S                   |  |      |  |                               |
| Harrisburg, .....           | Clarion, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | NW                  |  |      |  |                               |
| Hawley, .....               | Huntingdon, .....   | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Hawthorne, .....            | Indiana, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Huntingdon, .....           | Indiana, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Indiana, .....              | Indiana, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Johnstown, .....            | Indiana, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Kennett Square, .....       | Cambridge, .....    | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
| Lawrenceville, .....        | Chester, .....      | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |
|                             | Tioga, .....        | 45.92                   | 8.04              | February, .....  | 2.03           | October, ..... | 111             | 165                      | 124                | 86                         | W                   |  |      |  |                               |

|                               |                     |       |       |       |               |       |              |       |       |       |       |       |       |
|-------------------------------|---------------------|-------|-------|-------|---------------|-------|--------------|-------|-------|-------|-------|-------|-------|
| Lebanon, .....                | Lebanon, .....      | 12    | 42.20 | 6.20  | September, .. | 0.95  | October, ... | 51.5  | 131   | 129   | 142   | 94    | SW    |
| Le Roy, .....                 | Bradford, .....     | 11    | 38.45 | 6.84  | August, ....  | 1.34  | October, ... | 53.5  | 136   | 125   | 88    | 152   | SW    |
| Lewisburg, .....              | Union, .....        | 22    | 41.12 | 5.49  | August, ....  | 1.38  | October, ... | 45.0  | 108   | 127   | 109   | 129   | W     |
| Lock Haven, .....             | Clinton, .....      | 12    | 38.11 | 5.30  | August, ....  | 1.10  | April, ..... | 41.5  | 104   | 119   | 141   | 106   | W     |
| Lycippus, .....               | Westmoreland, ..... | 7     | 41.27 | 5.01  | May, .....    | 1.74  | November, .. | 44.5  | 155   | ..... | ..... | ..... | ..... |
| Mauch Chunk, .....            | Carbon, .....       | 10    | 44.65 | 6.05  | September, .. | 1.49  | October, ... | 45.4  | 100   | 197   | 65    | 103   | N     |
| Philadelphia, .....           | Philadelphia, ..... | 28    | 39.96 | 6.47  | March, .....  | 1.04  | April, ..... | 42.2  | 114   | 129   | 97    | 139   | SW    |
| 1529 Centennial avenue, ..... | Philadelphia, ..... | 9     | 43.47 | 7.12  | March, .....  | 1.43  | April, ..... | 42.7  | 120   | 132   | 121   | 112   | SW    |
| Pittsburgh, .....             | Allegheny, .....    | 29    | 33.85 | 8.72  | June, .....   | 2.10  | October, ... | 40.5  | 140   | 118   | 137   | 110   | NW    |
| Quakertown, .....             | Bucks, .....        | 28    | 49.06 | 8.16  | September, .. | 1.17  | October, ... | 32.5  | 112   | 88    | 155   | 122   | SW    |
| Reading 2, .....              | Berks, .....        | 30    | 39.44 | 5.67  | March, .....  | 1.30  | October, ... | ..... | 137   | ..... | ..... | ..... | ..... |
| Reedsville, .....             | Mifflin, .....      | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....                 | Clinton, .....      | ..... | 36.73 | 4.61  | September, .. | 1.23  | October, ... | 43.5  | 101   | 133   | 165   | 67    | ..... |
| Saegertown, .....             | Crawford, .....     | 8     | 37.53 | 5.95  | May, .....    | 0.54  | August, ...  | 60.4  | 114   | 42    | 150   | 173   | NW    |
| Scranton, .....               | Lackawanna, .....   | ..... | 37.80 | 6.30  | February, ..  | 0.63  | October, ... | 45.5  | 94    | 140   | 92    | 133   | W     |
| Selinsgrove, .....            | Snyder, .....       | 11    | 40.24 | 4.87  | February, ..  | 1.37  | April, ..... | 46.3  | 113   | 95    | 173   | 97    | SW    |
| Shingle House, .....          | Potter, .....       | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | W     |
| Smethport, .....              | McKean, .....       | 10    | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | SW    |
| Somerset, .....               | Somerset, .....     | 26    | 51.13 | 7.18  | September, .. | 2.21  | November, .. | 72.2  | 120   | 58    | 163   | 144   | NW    |
| South Bethlehem, .....        | Northampton, .....  | 23    | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | W     |
| South Eaton, .....            | Wyoming, .....      | 10    | 31.25 | 3.96  | March, .....  | 1.16  | October, ... | 45.5  | 98    | 169   | 96    | 100   | NW    |
| State College, .....          | Centre, .....       | 12    | 34.87 | 4.23  | March, .....  | 1.40  | October, ... | 37.2  | 127   | 164   | 119   | 82    | W     |
| St. Marys, .....              | Elk, .....          | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | ..... |
| Swarthmore, .....             | Delaware, .....     | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | NW    |
| Swiftwater, .....             | Monroe, .....       | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | ..... |
| Towanda, .....                | Bradford, .....     | ..... | 32.68 | 5.43  | August, ..... | 1.21  | October, ... | 40.7  | 117   | 145   | 92    | 128   | W     |
| Uniontown, .....              | Fayette, .....      | 12    | 50.74 | 8.17  | September, .. | 1.37  | April, ..... | 59.8  | 130   | 169   | 107   | 83    | SW    |
| Warren, .....                 | Warren, .....       | 11    | 45.42 | 7.19  | September, .. | 1.39  | August, ...  | 67.7  | 130   | 143   | 97    | 126   | SW    |
| Wellsboro, .....              | Tioga, .....        | 12    | 37.16 | 4.09  | June, .....   | 2.15  | May, .....   | 55.7  | 100   | 147   | 51    | 167   | N     |
| West Chester, .....           | Chester, .....      | 52    | 46.20 | 7.38  | March, .....  | 1.91  | October, ... | 52.1  | 134   | 199   | 46    | 120   | W     |
| Westtown, .....               | Chester, .....      | 10    | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | ..... |
| White Haven, .....            | Luzerne, .....      | ..... | ..... | ..... | .....         | ..... | .....        | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, .....           | Luzerne, .....      | 15    | 35.02 | 4.49  | March, .....  | 1.29  | October, ... | 54.0  | 73    | 138   | 62    | 165   | S     |
| Williamsport, .....           | Lycoming, .....     | 10    | 30.96 | 4.63  | December, ..  | 1.46  | January, ... | 31.9  | 95    | 167   | 119   | 79    | W     |
| York, .....                   | York, .....         | 12    | 49.78 | 6.70  | August, ..... | 0.92  | October, ... | 61.7  | 117   | 164   | 123   | 78    | W     |

1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 8 p. m. + 8 p. m. + 2. Mean of 8 a. m. + 8 p. m. + 2.  
The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.  
All records are used in determining State means; but State departures are determined by comparison of current data of only such stations as have normals.  
\*On other dates also.

Monthly and Annual Mean temperature for the Year 1899, with Departures from the Normal.

| Stations.             | January.     |            | February.    |            | March.       |            | April.       |            | May.         |            | June.        |            | July.        |            |
|-----------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
|                       | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. |
| Altoona.              | *25.1        | -1.2       | 21.3         | -5.2       | 35.3         | -1.0       | 50.8         | +1.5       | 60.8         | +1.2       | 69.2         | +0.3       | 70.9         | -0.4       |
| Aqueduct.             | 28.3         | -2.4       | 25.8         | -6.4       | 39.6         | -0.8       | 52.6         | +0.3       | 65.8         | +2.4       | 73.5         | +1.1       | 77.7         | +2.2       |
| Athens.               | 22.4         | .....      | 20.6         | .....      | 32.5         | .....      | 49.2         | .....      | 59.0         | .....      | 68.8         | .....      | 71.7         | .....      |
| Butler.               | .....        | .....      | 20.9         | .....      | 36.2         | .....      | 50.6         | .....      | 60.2         | .....      | 68.4         | .....      | 70.6         | .....      |
| Carlisle.             | 26.4         | -1.8       | 23.2         | -6.8       | 38.4         | +0.7       | 52.6         | +2.4       | 63.4         | +2.2       | 68.6         | -2.5       | *69.6        | .....      |
| Cassandra.            | 27.2         | .....      | 23.1         | .....      | 35.7         | .....      | 49.0         | .....      | 59.5         | .....      | 67.6         | .....      | 69.0         | .....      |
| Center Hall.          | 26.2         | .....      | 21.2         | .....      | 34.2         | .....      | 50.6         | .....      | 60.2         | .....      | 68.0         | .....      | 70.8         | .....      |
| Chambersburg.         | 26.5         | -2.1       | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Coatesville.          | 29.8         | -0.3       | 24.4         | -6.8       | 40.1         | +3.2       | 51.8         | +2.0       | 62.6         | +1.7       | 73.4         | +3.3       | 75.8         | +2.4       |
| Confluence.           | .....        | .....      | 22.0         | .....      | 38.4         | .....      | 49.6         | .....      | 61.4         | .....      | 71.3         | .....      | 73.2         | +0.6       |
| Coopersburg.          | 29.4         | -0.9       | 27.1         | -4.8       | 39.2         | +1.4       | 50.4         | +0.5       | 60.6         | +0.3       | 71.8         | +1.8       | *73.4        | .....      |
| Derry Station.        | 28.7         | .....      | 21.6         | .....      | 38.9         | .....      | 53.5         | .....      | 65.4         | .....      | 71.8         | .....      | 68.8         | .....      |
| Dushore.              | 22.0         | .....      | 20.2         | .....      | 31.9         | .....      | 45.7         | .....      | 57.2         | .....      | 66.2         | .....      | .....        | .....      |
| Dyberry.              | 20.6         | -0.6       | 18.5         | -4.1       | 30.4         | +1.2       | .....        | .....      | 62.2         | +1.7       | 72.4         | +2.0       | 74.0         | -0.2       |
| Easton.               | 28.6         | -0.1       | 24.4         | -4.3       | 37.5         | +1.1       | 50.4         | +1.5       | 59.6         | -1.2       | 67.6         | -0.7       | 70.4         | -0.3       |
| Emporium.             | *23.4        | -3.7       | 21.4         | -5.9       | 34.8         | -0.2       | 49.4         | +1.1       | .....        | .....      | .....        | .....      | .....        | .....      |
| Ephrata.              | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Erie.                 | 26.0         | 0          | 21.0         | -3.0       | 32.5         | +0.5       | 47.5         | +1.5       | 57.0         | 0          | 68.0         | 0          | 71.0         | -1.0       |
| Everett.              | 28.2         | .....      | 22.4         | .....      | *38.1        | .....      | *49.0        | .....      | 61.4         | .....      | *70.4        | .....      | *72.0        | .....      |
| Forks of Neshaminy 1. | 29.7         | -2.5       | 26.3         | -6.3       | 38.6         | -0.7       | *51.0        | -0.5       | 62.0         | -0.9       | 73.6         | +2.9       | 76.0         | +2.0       |
| Franklin.             | 25.7         | +2.6       | .....        | .....      | 35.0         | +3.0       | 49.8         | +6.5       | 60.4         | .....      | 68.0         | .....      | 71.2         | .....      |
| Gramplan.             | 22.6         | -0.4       | 19.1         | -5.6       | 32.7         | +1.7       | 49.8         | +5.8       | 60.2         | +3.1       | 68.6         | +1.7       | 71.4         | +0.8       |
| Greensboro.           | 31.6         | .....      | 25.8         | .....      | 43.6         | .....      | 53.8         | .....      | 64.4         | .....      | 72.1         | .....      | 74.2         | .....      |
| Hamburg.              | 26.2         | -3.8       | 25.3         | -4.0       | *37.6        | -0.5       | 52.4         | +2.2       | 62.8         | +1.0       | 72.5         | +1.5       | 74.2         | 0          |
| Hamlinon.             | 23.6         | -1.9       | 20.8         | -4.1       | 30.6         | -1.2       | 46.8         | +1.7       | 58.6         | +1.1       | 67.4         | +0.3       | 69.5         | -0.2       |
| Harrisburg.           | 28.6         | -1.4       | 24.1         | -5.9       | 38.4         | +0.4       | 52.5         | +1.5       | 63.0         | +1.0       | 72.6         | +1.6       | 75.1         | +1.1       |
| Hawley.               | 23.2         | .....      | 21.2         | .....      | 32.2         | .....      | 46.0         | .....      | 60.5         | .....      | 68.5         | .....      | 68.8         | .....      |
| Hawthorn.             | .....        | .....      | 21.4         | .....      | 36.6         | .....      | 51.5         | .....      | 60.8         | .....      | 69.1         | .....      | 71.2         | .....      |
| Huntingdon.           | *28.2        | -0.4       | 23.8         | -6.1       | 37.8         | +0.6       | 51.6         | +2.4       | *62.1        | +1.9       | 70.7         | +1.7       | 72.4         | +0.8       |
| Indiana.              | .....        | .....      | 24.0         | -8.2       | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Johnstown.            | 29.3         | -1.2       | 25.4         | -9.0       | 39.8         | +2.6       | 53.2         | +3.2       | 63.5         | +3.9       | 71.8         | +1.3       | 73.4         | +2.60      |
| Kennett Square.       | 30.6         | +0.3       | 25.1         | -7.0       | 39.6         | +2.5       | 51.3         | +2.5       | 62.0         | +1.3       | 72.6         | +2.9       | 74.7         | +1.2       |
| Lancaster.            | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Lawrenceville.        | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Lebanon.              | *26.3        | -1.7       | 19.8         | .....      | 32.6         | .....      | 47.2         | .....      | *56.4        | .....      | 67.9         | .....      | *70.0        | .....      |
| Le Roy.               | 21.5         | -2.5       | 23.3         | -6.9       | 37.6         | -0.7       | 51.4         | +1.9       | 61.6         | +1.4       | 70.8         | +1.2       | 72.0         | -0.2       |
| .....                 | .....        | .....      | 19.2         | -4.6       | 31.0         | -1.0       | 48.6         | +3.8       | 58.7         | +1.5       | 67.6         | +0.8       | 70.5         | +0.6       |

|                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lewisburg.        | 25.0  | +0.1  | 21.6  | -5.4  | 36.1  | +2.1  | 51.0  | +2.2  | 60.8  | +1.7  | 70.0  | +0.3  | 73.4  | +0.8  |
| Lycippus.         | 26.7  | -1.7  | 23.2  | -6.7  | 37.6  | +1.1  | 53.2  | +3.6  | 63.6  | +2.2  | 72.5  | +2.3  | 75.0  | +3.1  |
| Lock Haven.       | 28.8  | -0.1  | 21.8  | -7.1  | 38.0  | -1.5  | 51.9  | +1.5  | *64.5 | +4.0  | 73.2  | ..... | 78.2  | +0.8  |
| Mauch Chunk.      | 24.5  | -3.1  | 23.6  | -5.5  | 35.6  | -0.1  | 49.7  | +1.4  | 61.6  | +1.7  | 70.8  | +1.0  | 73.2  | +1.9  |
| Philadelphia (a). | 32.4  | +0.4  | 28.1  | -5.9  | 40.7  | +0.7  | 53.3  | +2.3  | 63.3  | +1.3  | 74.9  | +2.9  | 76.7  | +0.7  |
| Philadelphia (b). | 32.5  | +0.1  | 27.8  | -6.4  | 40.8  | -0.4  | 53.6  | +1.0  | 64.0  | +0.9  | 75.2  | +2.7  | 77.2  | +1.0  |
| Pittsburgh.       | 31.0  | 0.0   | 25.5  | -7.5  | 40.0  | +1.0  | 55.0  | +2.0  | 65.0  | +2.0  | 72.0  | +1.0  | 76.0  | +2.0  |
| Quakertown.       | 27.0  | -0.1  | 23.2  | -5.9  | 37.2  | +2.1  | 49.8  | +2.7  | 60.5  | +1.1  | 71.0  | +2.9  | 74.0  | +1.1  |
| Reading 2.        | 27.0  | -3.0  | 23.5  | -7.3  | 38.0  | -0.7  | 50.2  | -0.6  | 61.6  | +0.2  | 72.0  | +0.7  | 74.3  | -1.1  |
| Reedsville.       | ..... | ..... | *18.6 | ..... | *35.2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *72.4 | ..... |
| Renovo.           | 26.2  | ..... | 23.0  | ..... | 36.4  | ..... | 50.0  | ..... | 62.0  | ..... | 70.5  | ..... | 72.3  | ..... |
| Saagerstown.      | 27.4  | +4.1  | 20.3  | -2.9  | 34.5  | +0.5  | 49.1  | +3.3  | 59.4  | +2.6  | 67.0  | +0.9  | 69.6  | +0.6  |
| Scranton.         | 24.1  | ..... | 22.6  | ..... | 34.5  | ..... | 49.4  | ..... | 61.0  | ..... | 68.9  | ..... | 71.2  | ..... |
| Selinsgrove.      | 25.9  | -3.5  | 22.4  | -5.6  | 38.2  | +0.8  | 51.4  | +1.9  | 62.0  | +0.8  | 70.4  | 0     | 73.4  | -0.1  |
| Shingle House.    | ..... | ..... | ..... | ..... | ..... | ..... | 45.9  | ..... | 59.7  | ..... | 67.4  | ..... | 69.6  | ..... |
| Smethport.        | 22.2  | -1.6  | 19.6  | -4.3  | 32.2  | -1.0  | 47.1  | +2.8  | 57.0  | +1.2  | 65.4  | +0.2  | 67.6  | +0.6  |
| Somerset.         | 24.4  | -1.7  | 20.3  | -7.8  | 35.4  | +0.2  | 48.0  | +1.4  | 59.0  | +2.1  | 64.6  | ..... | 68.6  | +0.1  |
| South Bethlehem.  | 27.3  | -2.1  | 25.0  | -5.9  | 37.8  | -0.3  | 48.5  | +3.0  | 64.6  | +1.4  | ..... | ..... | ..... | ..... |
| South Eaton.      | 24.7  | -1.8  | 22.4  | -5.5  | 33.3  | -0.8  | 49.3  | +2.6  | 59.8  | +1.9  | 68.4  | +1.3  | 71.6  | +1.7  |
| State College.    | 25.0  | -1.6  | 21.2  | -6.5  | 34.4  | 0     | 50.9  | +3.1  | 60.7  | +1.6  | 69.2  | +1.6  | 72.0  | +1.9  |
| St. Marys.        | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Swarthmore.       | 29.3  | -0.7  | *25.7 | -8.2  | 39.8  | ..... | 52.5  | ..... | 63.0  | +1.9  | 74.2  | ..... | 77.0  | ..... |
| Switwater.        | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 56.8  | ..... | 65.6  | ..... | *67.0 | ..... |
| Towanda.          | 24.0  | ..... | 21.2  | ..... | 33.8  | ..... | 48.8  | ..... | 59.2  | ..... | 68.6  | ..... | 70.6  | ..... |
| Uniontown.        | 30.8  | -2.0  | 25.6  | -8.3  | 40.2  | +0.8  | 52.8  | +1.7  | 62.6  | +1.0  | 71.3  | +0.3  | 73.9  | +1.5  |
| Warren.           | 24.4  | ..... | 19.6  | ..... | 31.6  | ..... | 47.8  | ..... | 55.6  | ..... | 66.2  | ..... | 68.0  | ..... |
| Wellsboro.        | 23.3  | -1.2  | 21.8  | -4.0  | 33.4  | +2.2  | 47.6  | +1.1  | 58.2  | +1.2  | 68.1  | +3.7  | 70.3  | +1.9  |
| West Chester.     | 30.3  | +0.3  | 25.2  | -6.4  | 38.8  | +1.2  | 51.8  | +2.7  | 62.1  | +1.8  | 73.0  | +2.8  | 75.4  | +1.4  |
| Westtown.         | 28.8  | -3.6  | 23.2  | -8.0  | *38.0 | +1.0  | ..... | ..... | 60.8  | ..... | *71.6 | ..... | ..... | ..... |
| White Haven.      | 21.9  | ..... | 19.6  | ..... | 32.8  | ..... | 46.2  | ..... | 57.1  | ..... | 67.6  | ..... | ..... | ..... |
| Wilkes-Barre.     | 26.3  | -0.7  | 25.2  | -4.0  | 35.5  | +0.7  | 50.6  | +1.7  | 63.0  | +2.5  | 73.0  | +2.7  | 73.8  | +1.8  |
| Williamsport.     | 26.5  | -0.1  | 23.6  | -3.5  | 36.0  | +2.3  | 50.4  | +4.2  | 62.0  | +2.0  | 72.6  | +3.6  | 75.0  | +2.4  |
| York.             | 28.7  | -0.9  | 22.8  | -7.9  | 38.9  | +0.5  | 51.4  | +0.9  | 62.3  | +1.1  | 71.8  | +1.6  | 74.8  | +1.1  |

\* For number of days missing see Monthly Report. 1. Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. 2. Mean of 8 a. m. + 8 p. m. + 2.

Monthly and Annual Mean Temperature for the Year 1899, with Departures from the Normal—Continued.

| Stations.                   | August.      |            | September.   |            | October.     |            | November.    |            | December.    |            | Annual.      |            |
|-----------------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
|                             | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. | Temperature. | Departure. |
| Altoona, .....              | 70.4         | +1.1       | 60.4         | -2.3       | 53.9         | +2.5       | 41.3         | -0.4       | 29.0         | -2.5       | 49.1         | -0.5       |
| Aqueduct, .....             | 76.0         | +3.4       | 65.0         | -1.3       | 57.4         | +4.6       | 45.0         | +2.        | 35.2         | +1.1       | 53.5         | +0.6       |
| Athens, .....               | 71.2         | .....      | 59.8         | .....      | 53.6         | .....      | 39.4         | .....      | 30.4         | .....      | 48.2         | .....      |
| Butler, .....               | 69.2         | .....      | 60.3         | .....      | 53.8         | .....      | 41.6         | .....      | 29.4         | .....      | .....        | .....      |
| Carlisle, .....             | 69.4         | -3.1       | 59.8         | -4.8       | 50.7         | .....      | 38.7         | -2.0       | .....        | .....      | .....        | .....      |
| Cassandra, .....            | 68.1         | .....      | 59.4         | .....      | 53.5         | .....      | 40.3         | .....      | 30.3         | .....      | 48.6         | .....      |
| Center Hall, .....          | 71.3         | .....      | 61.4         | .....      | 53.8         | .....      | 40.5         | .....      | 31.6         | .....      | 49.2         | .....      |
| Chambersburg, .....         | .....        | .....      | 62.0         | -3.3       | *54.0        | +3.5       | 41.4         | -0.3       | 32.6         | -1.1       | .....        | .....      |
| Coatesville, .....          | 74.2         | +2.0       | 65.2         | -0.1       | 56.9         | +5.4       | 44.7         | +2.5       | 35.0         | +1.4       | 52.8         | +1.4       |
| Confluence, .....           | .....        | .....      | 61.8         | .....      | 55.2         | .....      | 42.2         | .....      | 29.2         | .....      | .....        | .....      |
| Coopersburg, .....          | 71.6         | 0          | 63.2         | -2.2       | 55.8         | +2.8       | 45.0         | +2.5       | 36.4         | +2.2       | 51.9         | +0.4       |
| Derry Station, .....        | 73.0         | .....      | 65.8         | .....      | 56.9         | .....      | 42.6         | .....      | 32.4         | .....      | 52.0         | .....      |
| Dushore, .....              | 67.0         | .....      | 57.0         | .....      | 49.7         | .....      | 37.2         | .....      | 28.2         | .....      | 45.9         | .....      |
| Dyberry, .....              | .....        | .....      | 47.9         | -0.6       | 61.2         | +5.1       | 37.8         | +2.8       | 28.2         | +2.9       | .....        | .....      |
| Easton, .....               | 72.6         | +0.8       | 63.6         | -1.5       | 55.2         | +3.3       | 42.7         | +1.2       | 34.1         | +2.1       | 51.3         | +0.6       |
| Emporium, .....             | 69.4         | +0.9       | 59.2         | -3.3       | 53.3         | +4.0       | 39.2         | -0.8       | 28.6         | -2.5       | 48.0         | -1.0       |
| Ephrata, .....              | .....        | .....      | 65.3         | .....      | 56.3         | .....      | 43.6         | .....      | 31.7         | .....      | .....        | .....      |
| Erie, .....                 | 71.0         | +1.0       | 61.7         | -2.3       | 57.0         | +3.0       | 43.7         | +1.7       | 31.8         | +0.8       | 49.0         | +0.2       |
| Everett, .....              | 70.9         | .....      | 61.4         | .....      | 54.8         | .....      | *41.2        | .....      | 30.8         | .....      | 50.0         | .....      |
| Forks of Neshaminy 1, ..... | 72.00        | -0.8       | *61.5        | -4.2       | 54.0         | +1.2       | *41.2        | -2.6       | 33.8         | -1.7       | 51.6         | -1.0       |
| Franklin, .....             | 70.2         | +5.5       | 61.6         | .....      | 55.8         | .....      | 42.2         | .....      | 30.4         | .....      | .....        | .....      |
| Gramplan, .....             | 70.1         | +2.2       | 58.8         | -2.2       | 54.2         | +6.4       | 39.4         | +3.8       | 27.7         | +0.8       | 47.9         | +1.5       |
| Greensboro, .....           | 73.0         | .....      | 64.1         | .....      | 56.6         | .....      | 43.8         | .....      | .....        | .....      | .....        | .....      |
| Hamburg, .....              | 72.7         | -0.4       | 64.2         | -2.5       | 56.7         | +3.2       | 45.8         | +3.6       | 37.8         | +4.2       | 52.4         | +0.4       |
| Hamlington, .....           | 69.4         | +1.6       | 60.1         | -2.1       | 54.0         | +5.9       | 38.5         | +0.4       | 29.0         | +0.3       | 47.4         | +0.2       |
| Harrisburg, .....           | 74.2         | +1.2       | 64.3         | -1.7       | 56.0         | +3.0       | 43.8         | +0.8       | 34.3         | +0.3       | 52.2         | +0.2       |
| Hawley, .....               | 68.7         | .....      | 58.4         | .....      | 52.0         | .....      | 38.4         | .....      | 27.4         | .....      | 47.1         | .....      |
| Hawthorn, .....             | 71.6         | .....      | 61.0         | .....      | 55.0         | .....      | 42.9         | .....      | 30.2         | .....      | .....        | .....      |
| Huntingdon, .....           | 71.4         | +0.7       | 62.2         | -1.8       | 55.0         | +4.5       | 41.9         | +0.3       | 33.2         | -0.3       | 50.9         | +0.5       |
| Indiana, .....              | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      | .....        | .....      |
| Johnstown, .....            | 72.8         | +3.1       | 63.4         | -0.9       | 56.8         | +5.0       | 43.2         | +3.5       | 31.8         | -2.8       | 52.0         | +0.9       |
| Kennett Square, .....       | 73.1         | +1.3       | 65.3         | -0.5       | 57.2         | +4.6       | 44.2         | +1.5       | 35.4         | +1.2       | 52.6         | +1.0       |
| Lancaster, .....            | .....        | .....      | .....        | .....      | .....        | .....      | *43.4        | .....      | *34.4        | .....      | .....        | .....      |
| Lawrenceville, .....        | 68.7         | .....      | 59.4         | .....      | *50.1        | .....      | *36.0        | .....      | 26.4         | .....      | .....        | .....      |
| Lebanon, .....              | 73.4         | +2.1       | *63.4        | -1.4       | *54.6        | +3.1       | 42.0         | +0.3       | 33.0         | -0.1       | 50.8         | 0          |
| Le Roy, .....               | 69.8         | +1.8       | 58.4         | -3.6       | 53.4         | +5.1       | 37.8         | +0.4       | 28.6         | +0.3       | 47.1         | +0.2       |



|                         |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lewisburg, .....        | 73.1  | +2.1  | 62.1  | -0.1  | 54.0  | +4.4  | 40.3  | +1.4  | 32.4  | +3.2  | 50.0  | +1.1  |
| Lock Haven, .....       | 73.8  | +3.9  | 63.6  | -0.6  | 55.3  | +4.6  | 41.8  | +0.3  | 32.4  | +0.2  | 51.6  | +1.1  |
| Lycippus, .....         | 72.0  | +1.1  | 64.4  | -2.3  | 57.2  | +3.5  | 42.7  | +0.1  | 32.0  | +1.6  | 50.0  | ..... |
| Mauch Chunk, .....      | 71.8  | +1.6  | 61.8  | -2.3  | 54.4  | +4.2  | 41.2  | +0.7  | 32.4  | +1.5  | 50.0  | +0.2  |
| Philadelphia (a), ..... | 74.8  | +0.8  | 67.0  | -1.0  | 58.6  | +2.6  | 46.3  | +1.3  | 37.5  | +1.5  | 54.5  | +0.6  |
| Philadelphia (b), ..... | 74.6  | -0.6  | 67.2  | -2.0  | 59.0  | +3.3  | 46.9  | +1.4  | 38.6  | +1.4  | 54.8  | +0.2  |
| Pittsburgh, .....       | 74.0  | +1.0  | 65.0  | +1.0  | 59.5  | +4.5  | 46.0  | +4.0  | 34.0  | 0     | 53.6  | +0.9  |
| Quakertown, .....       | 72.3  | +2.4  | 62.9  | -0.6  | 54.8  | +3.4  | 42.0  | +1.3  | 33.8  | +2.3  | 50.7  | +1.0  |
| Reading 2, .....        | 71.9  | 30.9  | 62.1  | -3.4  | 53.3  | +0.6  | 40.3  | -2.2  | 31.1  | -2.3  | 50.4  | -1.7  |
| Reedsville, .....       | 71.4  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....           | 71.6  | ..... | 61.2  | ..... | 54.3  | ..... | 40.5  | ..... | 31.1  | ..... | 49.9  | ..... |
| Saegerstown, .....      | 69.2  | +2.6  | 60.6  | -0.9  | 53.7  | +4.4  | 42.6  | +4.2  | 28.4  | -0.4  | 48.5  | +1.6  |
| Scranton, .....         | 70.4  | ..... | 61.5  | ..... | 53.2  | ..... | 39.8  | ..... | 31.6  | ..... | 49.0  | ..... |
| Selinsgrove, .....      | 72.8  | +1.2  | 62.2  | -1.9  | 53.4  | +2.8  | 40.8  | -0.8  | 32.8  | +0.8  | 50.5  | -0.3  |
| Shingle House, .....    | 68.0  | ..... | ..... | ..... | ..... | ..... | 37.8  | ..... | ..... | ..... | ..... | ..... |
| Smethport, .....        | 67.5  | +1.9  | ..... | ..... | 61.6  | +4.2  | 38.4  | +1.4  | 26.8  | -1.4  | ..... | ..... |
| Somerset, .....         | 69.2  | +2.4  | 58.3  | -1.7  | 53.5  | +5.9  | 41.2  | +2.6  | 27.4  | +1.6  | 47.5  | ..... |
| South Bethlehem, .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| South Eaton, .....      | 70.2  | +1.9  | 60.6  | -0.8  | 53.6  | +4.0  | 39.8  | -0.3  | 31.4  | +0.4  | 48.8  | +0.4  |
| State College, .....    | 71.0  | +2.4  | 60.6  | -2.0  | 54.2  | +4.9  | 40.2  | +0.4  | 29.8  | -1.8  | 49.1  | +0.3  |
| St. Marys, .....        | ..... | ..... | 58.2  | ..... | 52.5  | ..... | 38.2  | ..... | 27.2  | ..... | ..... | ..... |
| Swarthmore, .....       | 73.6  | ..... | 64.0  | ..... | ..... | ..... | 43.0  | ..... | 34.2  | ..... | ..... | ..... |
| Swiftwater, .....       | 65.8  | ..... | 57.2  | ..... | 50.6  | ..... | 36.7  | ..... | ..... | ..... | ..... | ..... |
| Towanda, .....          | 69.6  | ..... | 59.5  | ..... | 53.1  | ..... | 39.0  | ..... | 31.4  | ..... | 48.2  | ..... |
| Uniontown, .....        | 73.1  | +1.9  | 63.1  | -2.8  | 57.0  | +4.1  | 45.6  | +1.8  | 33.8  | -2.8  | 52.5  | -0.2  |
| Warren, .....           | 68.4  | ..... | 60.6  | ..... | 55.2  | ..... | 42.8  | ..... | 29.9  | ..... | 47.6  | ..... |
| Wellsboro, .....        | 69.2  | ..... | 58.8  | +0.1  | 52.6  | +4.7  | 40.2  | +3.0  | 29.6  | +0.2  | 47.8  | +1.5  |
| West Chester, .....     | 73.2  | +1.4  | 65.0  | -0.1  | 56.8  | +5.7  | 44.3  | +1.6  | 34.6  | +1.2  | 52.5  | +1.1  |
| Westtown, .....         | ..... | ..... | ..... | ..... | 55.0  | ..... | 42.9  | ..... | *31.2 | ..... | ..... | ..... |
| White Haven, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, .....     | 72.4  | +2.9  | 61.8  | -1.8  | 53.5  | +3.3  | 40.8  | +0.6  | 32.6  | +1.8  | 50.7  | +1.0  |
| Williamsport, .....     | 72.5  | +3.0  | 61.8  | -1.4  | 53.9  | +3.1  | 40.2  | +1.0  | 32.4  | +1.9  | 50.5  | +1.5  |
| York, .....             | 73.5  | +1.2  | 63.4  | -2.5  | 54.2  | +2.3  | 41.3  | -1.1  | 32.3  | -1.6  | 51.3  | -0.4  |

\* For number of days missing see Monthly Report. 1. Mean of 7 a. m. + 2 p. m. + 9 p. m. ÷ 4. 2. Mean of 8 a. m. + 8 p. m. + 2.

Monthly Maximum Temperatures for the Year 1899, with Dates.

| Stations.             | January. |       | February. |       | March.   |       | April.   |       | May.     |       | June.    |       |
|-----------------------|----------|-------|-----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|                       | Maximum. | Date. | Maximum.  | Date. | Maximum. | Date. | Maximum. | Date. | Maximum. | Date. | Maximum. | Date. |
| Altoona, .....        | 58       | 5     | 59        | 21    | 66       | 12    | 90       | 30    | 93       | 1     | 94       | 23    |
| Aqueduct, .....       | 53       | 15    | 56        | 21    | 75       | 12    | 86       | 30    | 96       | 28    | 100      | 6     |
| Athens, .....         | 52       | 5     | 49        | 20    | 63       | 12    | 87       | 30    | 90       | 1     | 98       | 5     |
| Butler, .....         | .....    | ..... | 55        | 21    | 67       | 11    | 88       | 30    | 83       | 1     | 91       | 23    |
| Carlisle, .....       | 49       | 22    | 56        | 22    | 72       | 12    | 84       | 31    | 87       | 28    | 83       | 7     |
| Cassandra, .....      | 59       | 4     | 55        | 21    | 63       | 11    | 86       | 30    | 85       | 1     | 89       | 23    |
| Center Hall, .....    | 52       | 5     | 54        | 22    | 62       | 12    | 83       | 30    | 92       | 1     | 90       | 7     |
| Chambersburg, .....   | 51       | 5     | 53        | 21    | 72       | 12    | 83       | 30    | 88       | 28    | 98       | 22    |
| Coatesville, .....    | 55       | 5     | 59        | 22    | 71       | 12    | 83       | 26    | 92       | 28    | 99       | 6     |
| Confluence, .....     | .....    | ..... | 62        | 22    | 75       | 11    | 87       | 30    | 91       | 1     | .....    | ..... |
| Coopersburg, .....    | 55       | 15    | 64        | 22    | 67       | 12    | 77       | 30    | 86       | 2     | 91       | 6     |
| Derry Station, .....  | 64       | 5     | 62        | 22    | 72       | 12    | 92       | 30    | 100      | 1     | 96       | 6     |
| Dushore, .....        | 49       | 5     | 56        | 21    | 60       | 12    | 84       | 30    | 83       | 28    | 94       | 6     |
| Dyberry, .....        | 50       | 5     | 49        | 22    | 54       | 12    | .....    | ..... | .....    | ..... | .....    | ..... |
| Easton, .....         | 50       | 5     | 53        | 21    | 65       | 12    | 80       | 26    | 86       | 28    | 95       | 6     |
| Emporium, .....       | 58       | 5     | 50        | 20    | 66       | 11    | 89       | 30    | 89       | 1     | 93       | 23    |
| Ephrata, .....        | .....    | ..... | .....     | ..... | .....    | ..... | .....    | ..... | .....    | ..... | .....    | ..... |
| Erle, .....           | 63       | 4     | 52        | 20    | 68       | 11    | 84       | 30    | 82       | 29    | 89       | 5     |
| Everett, .....        | 57       | 5     | 60        | 21    | 73       | 12    | 86       | 30    | 88       | 1     | 93       | 5     |
| Franklin, .....       | 62       | 5     | .....     | ..... | 71       | 11    | 89       | 30    | 86       | 29    | 92       | 23    |
| Gramplan, .....       | 52       | 4     | 48        | 21    | 64       | 11    | 90       | 30    | 84       | 29    | 92       | 23    |
| Greensboro, .....     | 65       | 4     | 61        | 21    | 70       | 11    | 90       | 30    | 88       | 29    | 94       | 6     |
| Hamburg, .....        | 48       | 22    | 56        | 20    | .....    | ..... | 83       | 25    | 90       | 2     | 96       | 6     |
| Hamilton, .....       | 49       | 23    | 54        | 21    | 57       | 12    | 81       | 30    | 86       | 1     | 93       | 14    |
| Harrisburg, .....     | 54       | 5     | 55        | 21    | 71       | 12    | 81       | 30    | 87       | 28    | 95       | 6     |
| Hawley, .....         | 54       | 4     | 55        | 28    | 60       | 12    | 82       | 30    | 92       | 1     | 94       | 24    |
| Hawthorn, .....       | .....    | ..... | 53        | 20    | 70       | 11    | 89       | 30    | 86       | 1     | 93       | 5     |
| Huntingdon, .....     | 57       | 5     | 67        | 21    | 71       | 12    | 91       | 30    | 95       | 1     | 98       | 6     |
| Indiana, .....        | .....    | ..... | 60        | 17    | .....    | ..... | .....    | ..... | .....    | ..... | .....    | ..... |
| Johnstown, .....      | 61       | 5     | 62        | 21    | 73       | 11    | 91       | 30    | 92       | 1     | 95       | 23    |
| Kennett Square, ..... | 54       | 5     | 58        | 22    | 71       | 12    | 82       | 25    | 90       | 28    | 98       | 6     |
| Lancaster, .....      | .....    | ..... | .....     | ..... | .....    | ..... | .....    | ..... | .....    | ..... | .....    | ..... |
| Lawrenceville, .....  | 53       | 4     | 53        | 20    | 62       | 12    | 76       | 18    | 80       | 29    | 95       | 5     |
| Lebanon, .....        | 50       | 5     | 54        | 21    | 70       | 12    | 82       | 30    | 93       | 28    | 95       | 6     |
| Le Roy, .....         | 50       | 5     | 50        | 20    | 60       | 12    | 85       | 30    | 89       | 1     | 90       | 5     |
| Lewisburg, .....      | 50       | 5     | 52        | 20    | 69       | 12    | 83       | 30    | 89       | 28    | 96       | 6     |

|                         |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lock Haven, .....       | 53    | 15    | 60    | 20    | 68    | 12    | 91    | 30    | 96    | 1     | 97    | 6     |
| Lycippus, .....         | 66    | 6     | 61    | 22    | 70    | 12    | 85    | 30    | 89    | 1     | ..... | ..... |
| Mauch Chunk, .....      | 49    | 5     | 59    | 22    | 69    | 12    | 83    | 30    | 90    | 28    | 98    | 6     |
| Philadelphia (a), ..... | 56    | 5     | 57    | 22    | 70    | 12    | 80    | 26    | 89    | 28    | 97    | 6     |
| Philadelphia (b), ..... | 55    | 6     | 59    | 22    | 70    | 12    | 81    | 26    | 90    | 28    | 98    | 6     |
| Pittsburgh, .....       | 66    | 4     | 60    | 21    | 71    | 11    | 80    | 30    | 86    | 18    | 93    | 5     |
| Quakertown, .....       | 51    | 5     | 54    | 21    | 67    | 12    | 81    | 25    | 88    | 28    | 96    | 6     |
| Reedsville, .....       | ..... | ..... | 62    | 25    | 59    | 11    | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....           | 59    | 6     | 54    | 20    | 65    | 12    | 88    | 30    | 90    | 1     | 94    | 23    |
| Saegerstown, .....      | 57    | 5     | 55    | 20    | 68    | 11    | 89    | 30    | 86    | 1     | 90    | 23    |
| Scranton, .....         | 51    | 6     | 52    | 21    | 65    | 12    | 86    | 30    | 90    | 1     | 93    | 6     |
| Selinsgrove, .....      | 50    | 15    | 54    | 22    | 71    | 12    | 84    | 30    | 90    | 1     | 95    | 6     |
| Shingle House, .....    | ..... | ..... | ..... | ..... | ..... | ..... | 89    | 30    | 92    | 1     | 94    | 7     |
| Smethport, .....        | 53    | 14    | 50    | 20    | 67    | 11    | 86    | 30    | 85    | 1     | 90    | 6     |
| Somerset, .....         | 58    | 5     | 56    | 21    | 68    | 11    | 82    | 30    | 86    | 3     | 92    | 28    |
| South Bethlehem, .....  | 49    | 14    | 56    | 21    | 62    | 12    | 74    | 14    | 88    | 28    | ..... | ..... |
| South Eaton, .....      | 55    | 14    | 53    | 22    | 63    | 12    | 83    | 30    | 87    | 1     | 91    | 6     |
| State College, .....    | 56    | 5     | 56    | 21    | 64    | 12    | 84    | 30    | 87    | 1     | 90    | 6     |
| St. Mary's, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Swarthmore, .....       | 54    | 6     | 54    | 22    | 67    | 12    | 89    | 26    | 88    | 28    | 96    | 6     |
| Swiftwater, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 82    | 1     | 88    | 6     |
| Towanda, .....          | 53    | 5     | 51    | 20    | 63    | 12    | 86    | 30    | 88    | 1     | 94    | 5     |
| Uniontown, .....        | 63    | 4     | 64    | 20    | 68    | 11    | 86    | 30    | 89    | 29    | 93    | 23    |
| Warren, .....           | 55    | 4     | 50    | 20    | 55    | 11    | 89    | 30    | 91    | 29    | 90    | 5     |
| Wellsboro, .....        | 52    | 15    | 56    | 20    | 60    | 12    | 85    | 30    | 90    | 1     | 93    | 6     |
| West Chester, .....     | 54    | 6     | 55    | 22    | 69    | 12    | 80    | 25    | 88    | 28    | 95    | 6     |
| Westtown, .....         | 55    | 5     | 52    | 22    | 73    | 12    | ..... | ..... | 87    | 28    | 92    | 7     |
| White Haven, .....      | 56    | 5     | 53    | 21    | 62    | 12    | 90    | 30    | 98    | 30    | 93    | 6     |
| Wilkes-Barre, .....     | 59    | 6     | 52    | 21    | 66    | 12    | 87    | 30    | 94    | 28    | 101   | 6     |
| Williamsport, .....     | 55    | 4     | 54    | 20    | 65    | 12    | 82    | 30    | 86    | 28    | 93    | 6     |
| York, .....             | 55    | 5     | 53    | 21    | 72    | 12    | 84    | 30    | 89    | 28    | 96    | 6     |

**STATE BOARD OF HEALTH.**

**Off. Doc.**

| Stations.             | July.    |       | August.  |       | September. |       | October. |       | November. |       | December. |       |
|-----------------------|----------|-------|----------|-------|------------|-------|----------|-------|-----------|-------|-----------|-------|
|                       | Maximum. | Date. | Maximum. | Date. | Maximum.   | Date. | Maximum. | Date. | Maximum.  | Date. | Maximum.  | Date. |
| Altoona, .....        | 91       | 4     | 93       | 21    | 93         | 8     | 90       | 15    | 65        | 22    | 59        | 12    |
| Aqueduct, .....       | 101      | 22    | 99       | 20    | 92         | 8     | 79       | 13    | 65        | 22    | 66        | 12    |
| Athens, .....         | 96       | 4     | 98       | 19    | 90         | 8     | 85       | 15    | 59        | 7     | 61        | 12    |
| Butler, .....         | 91       | 4     | 91       | 20    | 89         | 8     | 80       | 15    | 63        | 18    | 60        | 12    |
| Carlisle, .....       | 96       | 22    | 94       | 21    | 88         | 8     | 75       | 13    | 65        | 20    | 60        | 12    |
| Cassandra, .....      | 88       | 3     | 87       | 20    | 83         | 8     | 77       | 14    | 58        | 18    | 56        | 11    |
| Center Hall, .....    | 89       | 4     | 94       | 21    | 85         | 8     | 76       | 25    | 60        | 19    | 57        | 12    |
| Chambersburg, .....   | 94       | 23    | 96       | 21    | 89         | 8     | 78       | 13    | 64        | 10    | 63        | 12    |
| Coatesville, .....    | 100      | 22    | 97       | 21    | 93         | 6     | 84       | 15    | 67        | 11    | 67        | 12    |
| Confluence, .....     |          |       |          |       | 91         | 6     | 86       | 15    | 65        | 19    | 62        | 1     |
| Coopersburg, .....    | 91       | 23    | 91       | 21    | 83         | 8     | 79       | 14    | 65        | 16    | 64        | 12    |
| Derry Station, .....  | 97       | 24    | 98       | 21    | 93         | 1     | 94       | 16    | 62        | 19    | 61        | 13    |
| Dushore, .....        | 93       | 27    | 93       | 21    | 86         | 3     | 78       | 15    | 58        | 19    | 58        | 12    |
| Dyberry, .....        |          |       |          |       | 83         | 3     | 82       | 15    | 59        | 19    | 60        | 12    |
| Easton, .....         | 91       | 22    | 93       | 21    | 82         | 3     | 74       | 15    | 62        | 1     | 62        | 12    |
| Emporium, .....       | 93       | 4     | 92       | 20    | 86         | 3     | 82       | 15    | 57        | 19    | 60        | 12    |
| Ephrata, .....        |          |       |          |       | 92         | 8     | 82       | 13    | 60        | 19    | 65        | 12    |
| Erie, .....           | 89       | 3     |          |       | 91         | 7     | 81       | 14    | 62        | 18    | 62        | 12    |
| Everett, .....        | 91       | 23    | 94       | 21    | 90         | 3     | 78       | 15    | 65        | 22    | 59        | 12    |
| Franklin, .....       | 94       | 4     | 94       | 20    | 90         | 3     | 87       | 15    | 65        | 23    | 60        | 12    |
| Grampian, .....       | 90       | 23    | 92       | 20    | 83         | 1     | 78       | 15    | 58        | 19    | 56        | 11    |
| Greensboro, .....     | 98       | 25    | 94       | 20    | 91         | 3     | 84       | 15    | 65        | 18    | 64        | 11    |
| Hamburg, .....        | 96       | 30    | 96       | 21    | 89         | 8     | 80       | 13    | 60        | 19    | 63        | 12    |
| Hamlington, .....     | 89       | 4     | 96       | 21    | 84         | 8     | 83       | 15    | 58        | 8     | 57        | 12    |
| Harrisburg, .....     | 94       | 22    | 95       | 20    | 84         | 8     | 78       | 13    | 63        | 19    | 62        | 12    |
| Hawley, .....         | 92       | 4     | 94       | 21    | 84         | 8     | 84       | 13    | 62        | 9     | 60        | 12    |
| Hawthorn, .....       | 99       | 23    | 98       | 20    | 89         | 8     | 88       | 15    | 72        | 19    | 60        | 12    |
| Huntingdon, .....     | 95       | 3     | 101      | 21    | 91         | 3     | 89       | 10    | 66        | 23    | 63        | 12    |
| Indiana, .....        |          |       |          |       |            |       |          |       |           |       |           |       |
| Johnstown, .....      | 97       | 23    | 94       | 21    | 92         | 3     | 86       | 15    | 62        | 10    | 60        | 12    |
| Kennett Square, ..... | 97       | 22    | 96       | 21    | 90         | 6     | 81       | 13    | 67        | 11    | 65        | 11    |
| Lancaster, .....      |          |       |          |       |            |       |          |       | 64        | 22    | 73        | 12    |
| Lawrenceville, .....  | 94       | 4     | 96       | 20    | 90         | 3     | 84       | 15    | 57        | 9     | 58        | 11    |
| Lebanon, .....        | 96       | 23    | 97       | 20    | 88         | 8     | 79       | 13    | 61        | 10    | 65        | 12    |
| Le Roy, .....         | 90       | 4     | 93       | 21    | 86         | 3     | 79       | 26    | 64        | 19    | 57        | 12    |
| Lewisburg, .....      | 95       | 27    | 98       | 14    | 89         | 3     | 79       | 13    | 64        | 19    | 63        | 11    |

|                         |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lock Haven, .....       | 97    | 4     | 100   | 20    | 91    | 3     | 82    | 12    | 66    | 19    | 62    | 12    |
| Lycippus, .....         | 95    | 24    | 92    | 21    | 89    | 6     | 87    | 16    | 61    | 19    | 61    | 12    |
| Mauch Chunk, .....      | 95    | 22    | 98    | 21    | 86    | 3     | 83    | 15    | 62    | 19    | 64    | 12    |
| Philadelphia (a), ..... | 96    | 22    | 95    | 21    | 87    | 8     | 80    | 13    | 65    | 11    | 65    | 11    |
| Philadelphia (b), ..... | 96    | 22    | 95    | 21    | 89    | 8     | 80    | 12    | 64    | 11    | 66    | 11    |
| Pittsburgh, .....       | 95    | 23    | 96    | 20    | 92    | 5     | 86    | 15    | 68    | 18    | 65    | 12    |
| Quakertown, .....       | 96    | 22    | 96    | 21    | 88    | 8     | 82    | 13    | 61    | 11    | 64    | 1     |
| Reedsville, .....       | 93    | 4     | 95    | 20    | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....           | 92    | 22    | 96    | 20    | 89    | 3     | 82    | 15    | 61    | 19    | 61    | 12    |
| Saegerstown, .....      | 93    | 3     | 95    | 20    | 91    | 7     | 85    | 15    | 65    | 17    | 56    | 2     |
| Scranton, .....         | 94    | 4     | 98    | 21    | 87    | 8     | 82    | 13    | 59    | 19    | 62    | 12    |
| Sellinsgruve, .....     | 94    | 27    | 96    | 20    | 87    | 3     | 76    | 15    | 64    | 19    | 61    | 12    |
| Shingle House, .....    | 96    | 4     | 98    | 19    | 88    | 2     | 81    | 14    | 56    | 17    | ..... | ..... |
| Smethport, .....        | 90    | 4     | 92    | 20    | ..... | ..... | 83    | 15    | 57    | 19    | 58    | 11    |
| Somerset, .....         | 93    | 23    | 93    | 20    | 92    | 6     | 82    | 15    | 60    | 19    | 56    | 12    |
| South Bethlehem, .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| South Eaton, .....      | 91    | 4     | 95    | 21    | 86    | 3     | 80    | 15    | 64    | 19    | 62    | 11    |
| State College, .....    | 91    | 23    | 96    | 20    | 88    | 3     | 79    | 15    | 60    | 19    | 60    | 12    |
| St. Marys, .....        | ..... | ..... | ..... | ..... | 85    | 3     | 80    | 15    | 54    | 18    | 56    | 12    |
| Swarthmore, .....       | 97    | 22    | 90    | 5     | 87    | 1     | ..... | ..... | 61    | 11    | 61    | 12    |
| Swiftwater, .....       | 84    | 4     | 89    | 21    | 78    | 3     | 75    | 15    | 58    | 19    | ..... | ..... |
| Towanda, .....          | 92    | 4     | 95    | 21    | 88    | 3     | 79    | 15    | 61    | 20    | 61    | 12    |
| Uniontown, .....        | 92    | 4     | 93    | 21    | 88    | 3     | 81    | 28    | 64    | 18    | 63    | 11    |
| Warren, .....           | 90    | 2     | 89    | 20    | 84    | 3     | 83    | 15    | 57    | 22    | 52    | 12    |
| Wellsboro, .....        | 92    | 4     | 96    | 20    | 83    | 3     | 83    | 14    | 62    | 19    | 58    | 1     |
| West Chester, .....     | 96    | 22    | 92    | 21    | 88    | 6     | 78    | 15    | 63    | 11    | 62    | 11    |
| Westtown, .....         | ..... | ..... | ..... | ..... | ..... | ..... | 76    | 13    | 62    | 11    | 61    | 12    |
| White Haven, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, .....     | 94    | 4     | 97    | 21    | 87    | 3     | 81    | 13    | 61    | 19    | 62    | 11    |
| Williamsport, .....     | 91    | 8     | 94    | 19    | 88    | 3     | 80    | 13    | 63    | 19    | 61    | 11    |
| York, .....             | 95    | 22    | 95    | 20    | 89    | 3     | 78    | 13    | 62    | 19    | 64    | 12    |

Monthly Minimum Temperatures for the Year 1899, with Dates.

| Stations.       | January. |       | February. |       | March.   |       | April.   |       | May.     |       | June.    |       |
|-----------------|----------|-------|-----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|                 | Minimum. | Date. | Minimum.  | Date. | Minimum. | Date. | Minimum. | Date. | Minimum. | Date. | Minimum. | Date. |
| Altoona.        | -12      | 2     | -20       | 10    | 13       | 7     | 20       | 8     | 27       | 22    | 43       | 18    |
| Aqueduct.       | -7       | 2     | -14       | 10    | 21       | 21    | 26       | 11    | 42       | 22    | 53       | 18    |
| Athens.         | -8       | 2     | -18       | 11    | 11       | 21    | 19       | 9     | 31       | 10    | 37       | 11    |
| Butler.         |          |       | -27       | 11    | 10       | 21    | 16       | 3     | 24       | 22    | 38       | 17    |
| Carlisle.       | -8       | 2     | -15       | 11    | 20       | 21    | 23       | 3     | 40       | 17    | 43       | 27    |
| Cassandra.      | -8       | 2     | -16       | 10    | 13       | 7     | 19       | 3     | 35       | 22    | 43       | 30    |
| Center Hall.    | -12      | 2     | -19       | 10    | 12       | 21    | 20       | 4     | 38       | 22    | 40       | 18    |
| Chambersburg.   | -15      | 2     |           |       |          |       |          |       |          |       |          |       |
| Coatesville.    | -7       | 2     | -13       | 10    | 10       | 9     | 22       | 4     | 37       | 4     | 51       | 11    |
| Confuence.      | -13      | 2     | -23       | 11    | 3        | 7     | 19       | 4     | 35       | 22    | 44       | 17    |
| Coopersburg.    | -8       | 3     | -15       | 10    | 19       | 21    | 24       | 4     | 41       | 4     | 50       | 11    |
| Derry Station.  | -17      | 2     | -21       | 11    | 11       | 7     | 21       | 3     | 37       | 22    | 43       | 17    |
| Dushore.        | -21      | 2     | -26       | 11    | 7        | 21    | 15       | 4     | 28       | 10    | 32       | 11    |
| Dyberry.        | -19      | 2     | -20       | 11    |          |       |          |       |          |       |          |       |
| Easton.         | -3       | 2     | -12       | 20    | 17       | 21    | 25       | 3     | 41       | 4     | 47       | 11    |
| Emporium.       | -12      | 11    | -25       | 11    | 10       | 21    | 18       | 4     | 35       | 10    | 42       | 11    |
| Ephrata.        |          |       |           |       |          |       |          |       |          |       |          |       |
| Erie.           | -6       | 31    | -12       | 10    | 12       | 21    | 23       | 8     | 41       | 14    | 48       | 17    |
| Everett.        | -15      | 2     | -20       | 10    | 14       | 7     | 19       | 4     | 30       | 15    | 45       | 18    |
| Franklin.       | -18      | 11    |           |       | 8        | 21    | 6        | 3     | 35       | 14    | 36       | 17    |
| Grampian.       | -12      | 2     | -24       |       | 12       | 21    | 16       | 4     | 38       | 22    | 46       | 17    |
| Greensboro.     | -3       | 1     | -30       | 10    | 10       | 7     | 20       | 3     | 38       | 15    | 46       | 17    |
| Hamburg.        | -6       | 2     | -13       | 10    | 21       | 22    | 23       | 4     | 40       | 4     | 46       | 11    |
| Hamlington.     | -10      | 11    | -18       | 10    | 8        | 20    | 19       | 2     | 35       | 16    | 45       | 18    |
| Harrisburg.     | 1        | 2     | -13       | 10    | 20       | 21    | 27       | 3     | 47       | 4     | 53       | 11    |
| Hawley.         | -17      | 2     | -18       | 15    | 6        | 9     | 14       | 4     | 33       | 10    | 36       | 11    |
| Hawthorn.       |          |       | -23       | 11    | 11       | 21    | 16       | 3     | 35       | 11    | 39       | 17    |
| Huntingdon.     | -17      | 2     | -23       | 11    | 19       | 21    | 19       | 4     | 37       | 10    | 43       | 30    |
| Indiana.        |          |       | -22       | 10    |          |       |          |       |          |       |          |       |
| Johnstown.      | -8       | 2     | -17       | 10    | 13       | 7     | 23       | 3     | 39       | 22    | 46       | 17    |
| Kennett Square. | -6       | 2     | -13       | 11    | 20       | 21    | 24       | 4     | 37       | 4     | 49       | 20    |
| Lancaster.      |          |       |           |       |          |       |          |       |          |       |          |       |
| Lawrenceville.  |          |       | -39       | 11    | 5        | 21    | 18       | 4     | 30       | 10    | 45       | 22    |
| Lebanon.        | -14      | 2     | -16       | 10    | 18       | 21    | 21       | 6     | 40       | 22    | 48       | 11    |
| Le Roy.         | -8       | 11    | -20       | 10    | 7        | 21    | 18       | 3     | 38       | 16    | 45       | 11    |
| Lewisburg.      | -20      | 2     | -22       | 11    | 15       | 21    | 22       | 4     | 34       | 10    | 41       | 11    |

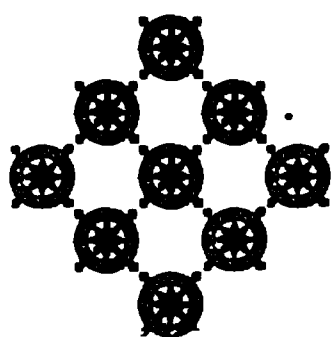
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|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lock Haven, .....       | -14   | 2     | -21   | 13    | 14    | 21    | 21    | 21    | 4     | 39    | 10    | 46    | 11    |
| Lycippus, .....         | 0     | 1     | -22   | 11    | 8     | 19    | 7     | 19    | 3     | 38    | 21    | 45    | 17    |
| Mauch Chunk, .....      | -9    | 3     | -14   | 10    | 13    | 20    | 21    | 20    | 4     | 40    | 5     | 41    | 11    |
| Philadelphia (a), ..... | 6     | 11    | -6    | 10    | 23    | 28    | 21    | 28    | 3     | 45    | 4     | 58    | 7     |
| Philadelphia (b), ..... | 6     | 11    | -6    | 10    | 22    | 29    | 21    | 29    | 3     | 45    | 4     | 56    | 17    |
| Pittsburgh, .....       | 5     | 31    | -20   | 10    | 13    | 25    | 7     | 25    | 2     | 42    | 21    | 47    | 17    |
| Quakertown, .....       | -13   | 2     | -15   | 11    | 18    | 24    | 21    | 24    | 4     | 37    | 4     | 46    | 11    |
| Reedsville, .....       | ..... | ..... | -16   | 11    | 11    | ..... | 19    | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....           | -6    | 2     | -23   | 11    | 13    | 19    | 21    | 19    | 6     | 38    | 10    | 45    | 11    |
| Saegertown, .....       | -18   | 31    | -24   | 10    | 5     | 2     | 21    | 2     | 3     | 32    | 23    | 36    | 17    |
| Scranton, .....         | -15   | 2     | -15   | 10    | 11    | 22    | 21    | 22    | 2     | 37    | 10    | 40    | 11    |
| Sellinsgrove, .....     | -13   | 2     | -22   | 11    | 16    | 24    | 21    | 24    | 6     | 37    | 11    | 45    | 11    |
| Shingle House, .....    | ..... | ..... | -29   | 11    | 7     | 17    | 21    | 17    | 3     | 28    | 9     | 34    | 10    |
| Smethport, .....        | -15   | 11    | -26   | 11    | 3     | 14    | 21    | 14    | 4     | 30    | 10    | 36    | 30    |
| Somerses, .....         | -13   | 2     | -24   | 11    | 5     | 12    | 6     | 12    | 3     | 30    | 22    | 38    | 30    |
| South Bethlehem, .....  | -3    | 2     | -9    | 10    | 22    | 28    | 17    | 28    | 2     | 40    | 5     | ..... | ..... |
| South Katon, .....      | -14   | 2     | -14   | 10    | 12    | 21    | 21    | 21    | 3     | 37    | 10    | 41    | 11    |
| State College, .....    | -9    | 2     | -20   | 10    | 13    | 21    | 21    | 21    | 3     | 40    | 22    | 45    | 11    |
| St. Marys, .....        | -11   | 11    | -22   | 10    | 4     | 12    | 21    | 12    | 3     | 33    | 22    | 42    | 11    |
| Swarthmore, .....       | -2    | 1     | -9    | 10    | 22    | 23    | 20    | 23    | 2     | 42    | 3     | 52    | 30    |
| Swiftwater, .....       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 35    | 5     | 39    | 11    |
| Towanda, .....          | -15   | 2     | -17   | 10    | 12    | 19    | 21    | 19    | 6     | 32    | 10    | 38    | 11    |
| Uniontown, .....        | -8    | 2     | -22   | 10    | 11    | 25    | 7     | 25    | 2     | 30    | 23    | 44    | 17    |
| Warren, .....           | -14   | 11    | -24   | 11    | 4     | 18    | 21    | 18    | 3     | 33    | 10    | 39    | 11    |
| Wellsboro, .....        | -12   | 2     | -25   | 11    | 10    | 13    | 21    | 13    | 4     | 30    | 10    | 38    | 11    |
| West Chester, .....     | 1     | 2     | -12   | 10    | 19    | 25    | 21    | 25    | 3     | 42    | 4     | 54    | 11    |
| Westtown, .....         | -6    | 2     | -13   | 11    | 20    | ..... | 21    | ..... | ..... | 37    | 4     | 51    | 19    |
| White Haven, .....      | -14   | 2     | -24   | 11    | 17    | 18    | 17    | 18    | 11    | 24    | 4     | 33    | 11    |
| Wilkes-Barre, .....     | -6    | 2     | 3     | 11    | 15    | 23    | 21    | 23    | 6     | 39    | 11    | 42    | 11    |
| Williamsport, .....     | -9    | 2     | -17   | 11    | 16    | 24    | 21    | 24    | 4     | 40    | 10    | 56    | 17    |
| York, .....             | -11   | 2     | -17   | 11    | 22    | 22    | 21    | 22    | 4     | 37    | 22    | 47    | 30    |

Monthly Minimum Temperatures for the Year 1899, with Dates—Continued.

| Stations.       | July.    |       | August.  |       | September. |       | October. |       | November. |       | December. |       |
|-----------------|----------|-------|----------|-------|------------|-------|----------|-------|-----------|-------|-----------|-------|
|                 | Minimum. | Date. | Minimum. | Date. | Minimum.   | Date. | Minimum. | Date. | Minimum.  | Date. | Minimum.  | Date. |
| Altoona.        | 46       | 1     | 45       | 17    | 33         | 23    | 25       | 22    | 21        | 13    | 0         | 31    |
| Aqueduct.       | 55       | 1     | 48       | 9     | 39         | 30    | 23       | 22    | 19        | 13    | 2         | 31    |
| Athens.         | 41       | 1     | 39       | 9     | 32         | 16    | 19       | 22    | 21        | 14    | 1         | 30    |
| Butler.         | 44       | 10    | 44       | 9     | 33         | 28    | 26       | 1     | 23        | 13    | 1         | 7     |
| Carlisle.       | 43       | 10    | 43       | 17    | 30         | 28    | 21       | 22    | 17        | 13    | .....     | ..... |
| Cassandra.      | 47       | 1     | 45       | 17    | 37         | 30    | 26       | 1     | 23        | 13    | 4         | 31    |
| Center Hall.    | 45       | 1     | 45       | 9     | 34         | 28    | 26       | 22    | 20        | 23    | 2         | 31    |
| Chambersburg.   | .....    | ..... | .....    | ..... | 35         | 28    | 25       | 22    | 21        | 20    | 5         | 31    |
| Coatesville.    | 47       | 1     | 47       | 17    | 35         | 28    | 25       | 22    | 23        | 14    | 5         | 31    |
| Confluence.     | 47       | 10    | 45       | 7     | 30         | 30    | 25       | 22    | 21        | 13    | 1         | 27    |
| Coopersburg.    | 50       | 1     | 51       | 9     | 41         | 15    | 28       | 22    | 26        | 13    | 6         | 31    |
| Derry Station.  | 48       | 1     | 48       | 7     | 36         | 17    | 25       | 2     | 20        | 27    | 3         | 31    |
| Dushore.        | 35       | 1     | 34       | 9     | 27         | 15    | 15       | 22    | 15        | 14    | 1         | 30    |
| Dyberry.        | .....    | ..... | .....    | ..... | 31         | 28    | 16       | 22    | 16        | 14    | 2         | 31    |
| Easton.         | 50       | 1     | 49       | 9     | 40         | 28    | 25       | 22    | 23        | 13    | 3         | 31    |
| Emporium.       | 45       | 1     | 43       | 9     | 33         | 28    | 23       | 22    | 20        | 13    | 7         | 30    |
| Ephrata.        | .....    | ..... | .....    | ..... | 38         | 28    | 26       | 22    | 22        | 13    | 4         | 31    |
| Erie.           | 53       | 10    | 54       | 15    | 37         | 30    | 34       | 3     | 30        | 12    | 4         | 31    |
| Everett.        | 48       | 4     | 44       | 17    | 32         | 29    | 26       | 23    | 21        | 14    | 4         | 31    |
| Franklin.       | 43       | 10    | 46       | 9     | 23         | 30    | 23       | 3     | 20        | 13    | 1         | 30    |
| Gramplan.       | 50       | 1     | 46       | 9     | 32         | 30    | 26       | 1     | 20        | 13    | 2         | 31    |
| Greensboro.     | 50       | 1     | 50       | 9     | 35         | 30    | 22       | 1     | 20        | 7     | .....     | ..... |
| Hamburg.        | 54       | 10    | 49       | 9     | 38         | 28    | 29       | 3     | 3         | 13    | 6         | 31    |
| Hamlington.     | 42       | 1     | 44       | 16    | 34         | 16    | 19       | 22    | 20        | 14    | 7         | 30    |
| Harrisburg.     | 55       | 1     | 55       | 17    | 41         | 30    | 31       | 22    | 23        | 27    | 7         | 31    |
| Hawley.         | 46       | 1     | 38       | 9     | 31         | 15    | 15       | 22    | 10        | 10    | 2         | 30    |
| Hawthorn.       | 46       | 10    | 44       | 9     | 29         | 30    | 22       | 1     | 21        | 13    | 1         | 7     |
| Huntingdon.     | 45       | 1     | 40       | 20    | 23         | 28    | 24       | 22    | 21        | 13    | 3         | 31    |
| Indiana.        | .....    | ..... | .....    | ..... | .....      | ..... | .....    | ..... | .....     | ..... | .....     | ..... |
| Johnstown.      | 48       | 1     | 48       | 17    | 35         | 28    | 23       | 1     | 25        | 27    | 4         | 31    |
| Kennett Square. | 49       | 1     | 50       | 17    | 38         | 28    | 26       | 23    | 23        | 13    | 2         | 31    |
| Lancaster.      | .....    | ..... | .....    | ..... | .....      | ..... | .....    | ..... | .....     | ..... | .....     | ..... |
| Lawrenceville.  | 43       | 31    | 36       | 9     | 3          | 15    | 13       | 3     | 15        | 7     | 6         | 30    |
| Lebanon.        | 43       | 31    | 46       | 1     | 36         | 28    | 24       | 22    | 23        | 14    | 7         | 29    |
| Le Roy.         | 49       | 1     | 48       | 8     | 33         | 3     | 22       | 23    | 20        | 13    | 4         | 31    |
| Lewisburg.      | 44       | 1     | 42       | 9     | 35         | 28    | 25       | 3     | 22        | 13    | 6         | 30    |



|                         |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lock Haven, .....       | 47    | 1     | 46    | 9     | 30    | 28    | 25    | 22    | 21    | 13    | 2     | 30    |
| Lycippus, .....         | 51    | 10    | 51    | 7     | 35    | 36    | 28    | 1     | 23    | 37    | 1     | 31    |
| Mauch Chunk, .....      | 43    | 1     | 43    | 9     | 34    | 15    | 21    | 22    | 21    | 14    | 1     | 34    |
| Philadelphia (a), ..... | 66    | 1     | 58    | 17    | 45    | 30    | 34    | 22    | 29    | 13    | 8     | 31    |
| Philadelphia (b), ..... | 60    | 1     | 57    | 17    | 45    | 27    | 33    | 22    | 29    | 13    | 9     | 31    |
| Pittsburgh, .....       | 55    | 10    | 55    | 7     | 39    | 3     | 30    | 1     | 28    | 20    | 5     | 31    |
| Quakertown, .....       | 46    | 1     | 47    | 17    | 36    | 15    | 23    | 22    | 23    | 14    | 3     | 31    |
| Reedsville, .....       | 45    | 1     | 45    | 17    | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Renovo, .....           | 45    | 1     | 44    | 9     | 35    | 28    | 25    | 22    | 18    | 14    | -1    | 30    |
| Saegertown, .....       | 41    | 1     | 40    | 8     | 27    | 15    | 22    | 2     | 19    | 11    | -10   | 30    |
| Scranton, .....         | 42    | 1     | 41    | 9     | 33    | 15    | 19    | 22    | 20    | 14    | 0     | 30    |
| Selinsgrove, .....      | 46    | 1     | 44    | 9     | 30    | 28    | 25    | 22    | 22    | 13    | 0     | 30    |
| Shingle House, .....    | 40    | 9     | 33    | 9     | ..... | ..... | ..... | ..... | 8     | 12    | ..... | ..... |
| Smethport, .....        | 38    | 1     | 40    | 9     | ..... | ..... | 20    | 3     | 16    | 13    | -11   | 30    |
| Somerset, .....         | 42    | 10    | 42    | 17    | 30    | 30    | 21    | 1     | 19    | 7     | -1    | 31    |
| South Bethlehem, .....  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| South Eaton, .....      | 43    | 1     | 41    | 16    | 34    | 16    | 19    | 22    | 20    | 14    | 2     | 30    |
| State College, .....    | 50    | 1     | 47    | 9     | 32    | 30    | 26    | 22    | 22    | 13    | 0     | 31    |
| St. Marys, .....        | 43    | 1     | 41    | 9     | 30    | 15    | 23    | 3     | 17    | 13    | -4    | 30    |
| Swiftmore, .....        | 61    | 31    | 55    | 16    | 37    | 30    | ..... | ..... | 26    | 26    | 8     | 31    |
| Swiftwater, .....       | 43    | 1     | 44    | 9     | 35    | 28    | 20    | 22    | 17    | 14    | ..... | ..... |
| Towanda, .....          | 41    | 1     | 39    | 9     | 32    | 28    | 19    | 22    | 20    | 14    | 0     | 30    |
| Uniontown, .....        | 50    | 1     | 53    | 7     | 38    | 30    | 28    | 1     | 26    | 13    | 1     | 31    |
| Warren, .....           | 42    | 10    | 43    | 9     | 33    | 28    | 24    | 3     | 18    | 13    | 1     | 31    |
| Wellsboro, .....        | 40    | 1     | 38    | 9     | 30    | 28    | 22    | 22    | 22    | 14    | -3    | 30    |
| West Chester, .....     | 54    | 1     | 55    | 17    | 42    | 30    | 29    | 22    | 20    | 13    | 4     | 31    |
| Westtown, .....         | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 23    | 14    | 3     | 31    |
| White Haven, .....      | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, .....     | 46    | 1     | 45    | 9     | 30    | 29    | 22    | 22    | 24    | 14    | 6     | 30    |
| Williamsport, .....     | 57    | 11    | 45    | 10    | 32    | 28    | 20    | 22    | 25    | 15    | 3     | 31    |
| York, .....             | 49    | 1     | 48    | 17    | 35    | 28    | 24    | 22    | 20    | 13    | 3     | 31    |



# INDEX.

|   | Page.        |
|---|--------------|
| Action of the Secretary as to the small-pox epidemic, .....               | 20           |
| Adams county, report for, .....   | 156          |
| Additions to library, .....   | 38           |
| Allegheny county, report for, .....                                       | 156, 564     |
| inspections in, .....   | 296          |
| Allentown, report for, .....  | 564          |
| Altoona, report for, .....  | 570          |
| inspection at, .....  | 230, 309     |
| Ambler, report for, .....   | 575          |
| American Public Health Association, .....                                 | 11, 132, 487 |
| Animals, diseases of, .....   | 986          |
| in infectious diseases, .....   | 854          |
| Annual reports distributed, .....   | 70           |
| reports of cities and boroughs, .....                                     | 507          |
| reports of inspectors, .....  | 132          |
| Anthrax, cases of, .....  | 27, 110      |
| from tanneries, .....   | 354          |
| Anti bubonic serum, .....   | 920          |
| Antitoxic serums, .....   | 12, 723      |
| Appendices, list of, .....  | 145          |
| Appointments, .....   | 35           |
| of inspectors, .....  | 77           |
| Archbald, report for, .....   | 575          |
| Arnold, H. A., inspection at Lancaster, .....                             | 212          |
| Artificial purification of water, .....                                   | 376          |
| Ashcraft, E. H., report of, .....   | 179          |
| inspection at Coudersport, .....  | 247          |
| Ashley, report for, .....   | 575          |
| Ashtola, inspection at, .....   | 286          |
| Aspinwall, report for, .....  | 575          |
| Associated Health Authorities of Pennsylvania, sixth annual meeting,...   | 140, 413     |
| Atkinson, W. B., inspection at Doylestown, Lahaska, Plumsteadville, etc., | 208          |
| inspection at Willow Grove, .....   | 232          |
| inspections at Bedford and Huntingdon, .....                              | 267          |
| inspections in Huntingdon, Bedford, Fulton and Fayette<br>counties, ..... | 268          |
| inspections at Homer City, etc., .....                                    | 288          |
| inspection at Washington Street Wharf, .....                              | 311          |
| Auburn, report for, .....   | 576          |
| Austin, report for, .....   | 576          |
| Avalon, report for, .....   | 576          |

|  | Page.                        |
|--|------------------------------|
| Avondale, report for, .....  | 577                          |
| Babcock, E. V., inspection at Ashtola, .....                       | 286                          |
| Bacteriologists, .....   | 722, 833                     |
| Baker, W. W., inspection at Dunlo, .....                           | 311                          |
| Balmer, A. F., inspections at Canoe and McCalmont townships, ..... | 316                          |
| Bangor, report for, .....  | 578                          |
| Banks, W. H., report of, .....                                     | 169                          |
| Barbers, hints for, .....  | 913                          |
| Bardwell, E. O., inspection at Sinnemahoning, .....                | 235                          |
| report of, .....   | 159                          |
| Bashore, H. B., report of, .....                                   | 163                          |
| Bath, report for, .....  | 579                          |
| Beaver Falls, report for, .....                                    | 579                          |
| Beavertown, inspection at, .....                                   | 216                          |
| Bedford, report for, .....   | 580                          |
| county, inspections in, .....                                      | 263, 268, 275                |
| Beech Lake, inspection at, .....                                   | 249                          |
| Bellefonte, report for, .....                                      | 582                          |
| Belle Vernon, report for, .....                                    | 582                          |
| Bell township, inspection in, .....                                | 318                          |
| Bendersville, report for, .....                                    | 582                          |
| Berks county, inspection of bone boiling in, .....                 | 209                          |
| Bethlehem, report, .....   | 582                          |
| Birdsboro, report for, .....                                       | 582                          |
| Births, .....  | 519, 525, 529, 534, 537, 542 |
| Bituminous mines, law on, .....                                    | 954                          |
| Blackwood, W., inspection at Mount Hope, .....                     | 198                          |
| death of, .....  | 70                           |
| Blair county, report for, .....                                    | 158                          |
| Blairsville, report for, .....                                     | 583                          |
| Blakely, report for, .....   | 583                          |
| Blindness, prevention of, .....                                    | 856                          |
| Bloomsburg, report for, .....                                      | 583                          |
| Blossburg, report for, .....                                       | 583                          |
| Boardman, W. H., inspection at State Asylum, Norristown, .....     | 207                          |
| inspection at Marcus Hook, .....                                   | 222                          |
| inspection at West Pittston, .....                                 | 251                          |
| Boards of health, established, .....                               | 34                           |
| of health, .....   | 777                          |
| Bodies, disinterment, etc., of, .....                              | 846                          |
| transportation of, .....   | 14                           |
| Bone boiling, .....  | 96, 209, 211                 |
| Bonvain, inspection at, .....                                      | 239                          |
| Booneville, inspection at, .....                                   | 196                          |
| Borland, inspections at, .....                                     | 306                          |
| Boroughs, annual reports of, .....                                 | 507                          |
| Bower Hill, inspections at, .....                                  | 306                          |
| Boyer, Dr. P. A., added to the board, .....                        | 51                           |
| death of, .....  | 5                            |
| Boyertown, report for, .....                                       | 583                          |
| Bradford, report for, .....  | 584                          |
| Bridgeport, report for, .....                                      | 584                          |
| Bristol, report for, .....   | 584                          |

|  | Page.                   |
|--|-------------------------|
| Brockwayville, report for, .....   | 584                     |
| Brookville, report for, .....  | 584                     |
| Brumbaugh, A. B., inspections in Huntingdon county, .....  | 265                     |
| Bubonic plague, .....  | 29                      |
| to be reported, .....  | 134                     |
| Burials must be at certain depth, .....  | 858                     |
| Burial permits for still-born, .....   | 808                     |
| Burgettstown, report for, .....  | 584                     |
| Butler, report for, .....  | 585                     |
| Butter, law for, .....   | 978                     |
| Butterine, law on, .....   | 980                     |
| By laws of State Board, .....  | 839                     |
| California, report for, .....  | 585                     |
| Cambria county, inspections in, .....  | 812                     |
| report for, .....  | 159                     |
| Cameron county, report for, .....  | 159                     |
| Camps, garbage and excreta in, .....   | 499                     |
| Canoe, inspection at, .....  | 316                     |
| Canton, report for, .....  | 585                     |
| Carbon county, report for, .....   | 160, 161                |
| Carbondale, report for, .....  | 586                     |
| Carlisle, report for, .....  | 586                     |
| Carrolltown, report for, .....   | 587                     |
| Catawissa, report for, .....   | 588                     |
| Catasauqua, report for, .....  | 587                     |
| Causes of death, .....   | 520, 524, 539, 553, 737 |
| Cawley, M. F., inspection at South Mountain, .....   | 202                     |
| report of .....  | 172                     |
| Cellars must be cleaned, .....   | 855                     |
| Cemeteries, inspection, .....  | 93                      |
| Cemetery location objectionable, .....   | 204                     |
| Centreville, report for, .....   | 588                     |
| Centre Hall, report for, .....   | 588                     |
| Cerebro-spinal meningitis, .....   | 27, 58, 92, 702, 771    |
| Chadwick, B., inspection at Riderville, .....  | 201                     |
| inspection at Kane, .....  | 203                     |
| Chambersburg, inspection at, .....   | 227                     |
| report for, .....  | 588                     |
| Changes in the board, .....  | 4                       |
| Chester, inspection at, .....  | 205                     |
| report for, .....  | 588                     |
| Chemists of State Board, .....   | 834                     |
| Children, deaths, .....  | 541, 657, 674           |
| to be instructed as to danger of infection, .....  | 855                     |
| Circulars, .....   | 865                     |
| Circular letters on the progress of small-pox in the State and precautions<br>to prevent its spread, ..... | 330                     |
| Cities, annual reports of, .....   | 507                     |
| tabular abstracts of reports, .....  | 510                     |
| Claims for property, .....   | 106                     |
| Clarion county, report for, .....  | 161, 539                |
| Clarksville, report for, .....   | 589                     |
| Climatic value of Pocono, .....  | 829                     |

|   | Page.                             |
|---|-----------------------------------|
| Clinton county, report for, .....   | 162                               |
| Closure of schools, .....   | 856                               |
| Cokeville, report for, .....  | 589                               |
| Collingdale, report for, .....  | 589                               |
| Colwyn, report for, .....   | 589                               |
| Committees of State Board, .....  | 831                               |
| reports of, .....   | 72, 192                           |
| Communicable diseases, .....  | 19, 110, 519, 604                 |
| Comparative mortality, .....  | 549, 628, 653, 675, 736           |
| Complaints, .....   | 99, 129                           |
| attended to by correspondence, .....  | 505                               |
| Conemaugh, inspection at, .....   | 285                               |
| Conferences and conventions, .....  | 10, 407                           |
| Conference with health board of Bridgeton, .....  | 89                                |
| of boards of health, .....  | 10                                |
| Connellsville, report for, .....  | 589                               |
| Conshohocken, report for, .....   | 51, 590                           |
| Constitution of the Board, .....  | 834                               |
| Constitutionality of small-pox law affirmed, .....  | 881                               |
| Contagions, hospitals for, .....  | 906                               |
| Contagious disease, placarding, .....   | 820, 857                          |
| Contagious diseases, .... 524, 525, 534, 536, 540, 547, 561, 564, 570, 582, 612, 636, 643,<br>659, 661, 735, 754, 756, 773. |                                   |
| inter-state notification, .....   | 850                               |
| what are, .....   | 852                               |
| must be reported, .....   | 853                               |
| Conventions, .....  | 99, 132                           |
| Cooley, T. M., inspection at Greenfield, .....  | 203                               |
| Cooper, Dr., death, .....   | 103                               |
| Coplin, W. M. L., examination of specimens from suspected yellow fever, ..  | 215                               |
| Correspondence, .....   | 37, 793                           |
| Coudersport, inspection at, .....   | 247                               |
| Cow stables, .....  | 117                               |
| insanitary, .....   | 223                               |
| Crafton, report for, .....  | 590                               |
| Cressona, report for, .....   | 590                               |
| Croup, .....  | 702                               |
| Cumberland county, report for, .....  | 163                               |
| Cunningham, J. S., report as to small-pox, .....  | 280                               |
| Curry, E. A., inspection at Limeridge, .....  | 316                               |
| Curwensville, report for, .....   | 590                               |
| Daland, Judson, inspection at Nanticoke, .....  | 243                               |
| Dallastown, report for, .....   | 590                               |
| inspection at, .....  | 218                               |
| Danville, report for, .....   | 590                               |
| Darby, inspection at, .....   | 193, 210                          |
| report for, .....   | 591                               |
| Dayton, report for, .....   | 591                               |
| Dead transportation, changes in rules, .....  | 133                               |
| Death certificate, change in, .....   | 135                               |
| Deaths, causes of, .....  | 520, 525, 526, 528, 536, 542, 765 |
| Death rate, .....   | 524, 534                          |
| Deaths registration, .....  | 821                               |

|  | Page.              |
|--|--------------------|
| Delaware Pathological Laboratory, .....  | 12                 |
| river as water supply, .....   | 356                |
| Water Gap, report for, .....   | 591                |
| Delta, report for, .....   | 591                |
| Deputy inspectors appointed, .....   | 77, 139            |
| Derry township, inspection at, .....   | 250                |
| Destitution in quarantine, .....   | 808                |
| Diagnosis of small-pox disputed, .....   | 20                 |
| of typhoid fever, .....  | 723                |
| Diarrhoel diseases, .....  | 704                |
| Dickinson Seminary, inspection at, .....   | 251                |
| Diphtheria outbreaks, ..24, 56, 90, 112, 116, 122, 176, 193, 201, 202, 216, 235, 526, 528,<br>533, 570, 612, 636, 655, 664, 702, 722 |                    |
| Disinfection, .....  | 557, 694, 725      |
| of sick room, .....  | 858                |
| of troops, .....   | 817                |
| Disinfecting solutions, .....  | 859                |
| Disposal of sewage of State institutions, .....  | 16                 |
| Distribution of circulars, etc., .....   | 36                 |
| Drainage, .....  | 116, 565, 613, 634 |
| at Marcus Hook, .....  | 114                |
| into creek, .....  | 825                |
| Dorrancetown, report for, .....  | 591                |
| Downingtown, report for, .....   | 592                |
| Doylestown, report for, .....  | 592                |
| DuBois, report from, .....   | 328, 596           |
| Durring, L. A., suspected case of leprosy, .....   | 352                |
| Duncannon, report from, .....  | 593                |
| Dunlo, inspection at, .....  | 311                |
| Dunmore, report for, .....   | 594                |
| Duties of the State Board, .....   | 836                |
| Dysentery, .....   | 117, 221           |
| East Bangor, report from, .....  | 594                |
| East Brady, report from, .....   | 594                |
| East Greensburg, report for, .....   | 595                |
| Easton, inspection at, .....   | 216                |
| East Stroudsburg, report from, .....   | 595                |
| Edenburg, report for, .....  | 595                |
| Ehrenfeld, N. F., inspection at Homer City, .....  | 287                |
| report of, .....   | 168                |
| Eldred, report for, .....  | 599                |
| Elliott, report for, .....   | 600                |
| Emaus, report for, .....   | 600                |
| Embalmers, rights of boards to license, opinion on, .....  | 15                 |
| Emergency fund, .....  | 987                |
| fund, drawn on, .....  | 104                |
| fund, opinion on, .....  | 14                 |
| hospitals, .....   | 920                |
| Ensworth, report for, .....  | 601                |
| Enforcement of quarantine, .....   | 856                |
| Engineer inspectors, .....   | 833                |
| Ephrata, report for, .....   | 601                |

|   | Page.  |
|---|--|
| Epidemics, .....  | 265  |
| limiting, .....   | 851  |
| suppression of, by State Board, .....   | 806  |
| Erie county, report for, .....  | 164, 519, 603  |
| Ernst, C. J., inspection in Bell township, .....  | 318  |
| Esplen, report for, .....   | 608  |
| Exclusion from school in typhoid fever, .....   | 828  |
| Excreta in camps, .....   | 499  |
| Executive committee report, .....   | 148  |
| Exeter, report for, .....   | 608  |
| Expenses in outbreaks of disease, opinion on, .....   | 15   |
| Exposure of infected persons forbidden, .....   | 853  |
| Extension of water supply of city of Philadelphia, abstract from report of<br>experts on, ..... | 356  |
| Factoryville, report for, .....   | 608  |
| False report of small-pox, .....  | 580  |
| Fay, John, inspection at Altoona, .....   | 309  |
| Fayette county, inspections in, .....   | 268, 289   |
| Fernwood, inspection at, .....  | 199  |
| Fertilizing establishment, .....  | 121, 236   |
| Filtered vs. Mountain water, .....  | 372  |
| water supplies, .....   | 397  |
| Filter plants for water supply, .....   | 381  |
| Filtration experiments, .....   | 386  |
| Financial report, .....   | 43   |
| Findley, W. M., report of, .....  | 158  |
| inspection at Altoona, .....  | 230  |
| Fleitz, F. W., opinion as to power of State Board, .....  | 807  |
| who to bear expense in quarantine, .....  | 808  |
| Forest City, report for, .....  | 609  |
| Forestry and sanitation, .....  | 408  |
| Forest county, report for, .....  | 167  |
| Forksville, inspection at, .....  | 234  |
| Formaldehyde, .....   | 861  |
| Formaldehyde, amended regulation for, .....   | 133  |
| Formalin, .....   | 677  |
| Form of report of inspector, .....  | 941  |
| Forms of State Board, .....   | 865  |
| Frackville, report for, .....   | 609  |
| Franklin, inspection at, .....  | 286  |
| Fredonia, report for, .....   | 609  |
| Free, S. M., report of DuBois, .....  | 328  |
| Freeland, report for, .....   | 609  |
| Freeport, report for, .....   | 609  |
| Fulton county, inspections in, .....  | 268, 294   |
| Funerals after contagious diseases, .....   | 854  |
| Gable, I. C., inspection at Beavertown, .....   | 218  |
| report of, .....  | 185  |
| Gafney, inspection at, .....  | 241  |
| Garbage disposal, .....   | 11, 216, 527, 546, 565, 606, 612, 644, 657, 730, 843 |
| Garbage, etc., in camps, .....  | 499  |
| Garey, H., inspection in Somerset county, .....   | 282  |
| Gettysburg, report for, .....   | 609  |



|  | Page.                   |
|--|-------------------------|
| Gladden, small-pox at, .....                         | 95                      |
| Glen Campbell, report for, .....                     | 610                     |
| Glendon, report for, .....                           | 610                     |
| Glenfield, report for, .....                         | 610                     |
| Glenolden laboratory inspection, .....               | 83                      |
| report for, .....                                    | 610                     |
| Glen Rock, report for, .....                         | 610                     |
| Greenfield, inspection at, .....                     | 203                     |
| Greensburg, report for, .....                        | 610                     |
| Greenwood, tannery pollution, .....                  | 229                     |
| Grippe, .....  | 623                     |
| Groff, G. G., resignation of, .....                  | 85                      |
| Grove City, report for, .....                        | 611                     |
| Halifax, report for, .....                           | 611                     |
| Hamilton, A. T., inspection at Derry township, ..... | 250                     |
| Hammer, R. B., report of, .....                      | 183                     |
| inspection at Webster, .....                         | 228                     |
| inspection in Westmoreland county, .....             | 318                     |
| Harrisburg, report for, .....                        | 611                     |
| Harvey, Dr. C. H., appointed on the board, .....     | 82                      |
| Hawley, report for, .....                            | 611                     |
| Hazleton, report for, .....                          | 611                     |
| Health boards and embalmers, .....                   | 798                     |
| Heilman, S. P., report of, .....                     | 171                     |
| Helixville, inspection in, .....                     | 275                     |
| Hess, H. N., report of, .....                        | 161                     |
| Hill, H. H., inspections in Bedford county, .....    | 275                     |
| Hogs in town, .....                                  | 773                     |
| Homer City, inspection at, .....                     | 287                     |
| report for, .....                                    | 616                     |
| Hopbottom, report for, .....                         | 616                     |
| Hospitals for contagions, .....                      | 906                     |
| House, refuse, .....                                 | 843                     |
| Houtzdale, report for, .....                         | 617                     |
| Huntingdon county inspections, .....                 | 265, 267, 268           |
| Hygiene for barbers, .....                           | 913                     |
| Hygiene laboratory, .....                            | 13                      |
| Implertown, inspection at, .....                     | 275                     |
| Indiana, inspection at, .....                        | 287, 288                |
| Indiana county, report for, .....                    | 168                     |
| Infectious diseases, .....                           | 524, 528, 621, 764, 766 |
| Infection must be prevented, .....                   | 854                     |
| Inspections ordered, .....                           | 31, 59, 92, 114         |
| by the Secretary, .....                              | 30                      |
| reports, .....                                       | 189                     |
| Inspectors annual reports, .....                     | 68                      |
| appointed, .....                                     | 139                     |
| reports, .....                                       | 155                     |
| Influenza, .....                                     | 704                     |
| Injury by sewer, liability for, .....                | 809                     |
| Instrument disinfection, .....                       | 915                     |
| Inter-state notification of disease, .....           | 33, 850                 |
| Investigation of diseases of animals, .....          | 986                     |

|   | Page.    |
|---|----------|
| Isolation demanded, .....   | 854      |
| period, .....   | 855      |
| Jail, insanitary, .....   | 124, 247 |
| Jamestown, report for, .....                                      | 617      |
| Jeannette, report for, .....                                      | 617      |
| Jeddo, report for, .....  | 617      |
| Jenkintown, report for, .....                                     | 617      |
| Johnsonburg, report for, .....                                    | 617      |
| Johnstown, report for, .....                                      | 618      |
| Jonestown, report for, .....                                      | 621      |
| Juniata county, report for, .....                                 | 169      |
| Kane, inspection at, .....  | 203      |
| Kellettville, inspection at, .....                                | 195      |
| Kennett Square, report for, .....                                 | 622      |
| Kenworthy, W. B., report of, .....                                | 178      |
| Kibler, C. B., report of, .....                                   | 164      |
| Kinsey, J. L., opinion as to burial permits for still-born, ..... | 808      |
| Kinzua Creek, inspection at, .....                                | 237      |
| report for, .....   | 622      |
| Kittanning, report for, .....                                     | 622      |
| Knapp, C. P., inspection at Harvey's and Pike Creek, .....        | 192      |
| report of, .....  | 174      |
| Knapp, J. J., inspection at Kinzua Creek, .....                   | 237      |
| inspection at Newtown, .....                                      | 237      |
| inspection at Mt. Alton, .....                                    | 238      |
| inspection at Kushequa, .....                                     | 238      |
| inspection at Bohvain, .....                                      | 239      |
| inspection at Olivedale, .....                                    | 240      |
| inspection at Westline, .....                                     | 240      |
| inspection at Gafney, .....                                       | 241      |
| Kushequa, inspection at, .....                                    | 238      |
| Kutztown, report for, .....                                       | 623      |
| examination at State Normal School, .....                         | 192      |
| Laboratories, Pocono, .....                                       | 12       |
| Lancaster county, report for, .....                               | 169      |
| report for, .....   | 623      |
| inspection at, .....  | 212      |
| Township School Board regulation, .....                           | 795      |
| Landinville, report for, .....                                    | 629      |
| Lansdowne, inspection at, .....                                   | 220      |
| report for, .....   | 629      |
| Lansford, inspection at, .....                                    | 197      |
| report for, .....   | 629      |
| Laporte, inspection at, .....                                     | 225      |
| report for, .....   | 629      |
| Latrobe, report for, .....  | 630      |
| Law for prevention and restruction of small-pox, .....            | 875      |
| for prevention of water pollution, .....                          | 88       |
| for school boards of health, .....                                | 945      |
| to protect water, .....   | 975      |
| Layton, inspection at, .....                                      | 292      |
| Lead pipes and water, .....                                       | 828      |

|  | Page.                  |
|--|------------------------|
| Lebanon county, report for, .....  | 171                    |
| report for, .....  | 632                    |
| Lee, Benjamin, efforts to prevent spread of small-pox, .....                             | 330                    |
| on forestry and sanitation, .....  | 408                    |
| practical hints for organized sanitary work, .....                                       | 480                    |
| report as delegate to the American Public Health Association, .....                      | 487                    |
| treatment of garbage and excreta in military camps, ....                                 | 499                    |
| Legal decisions, .....   | 799                    |
| Legislation, discussion on, .....  | 416                    |
| Lehigh county, report for, .....   | 172                    |
| Lehighton, report for, .....   | 635                    |
| Leprosy, .....   | 678                    |
| act of congress for investigation of, .....  | 69                     |
| suspected, .....   | 28, 124, 243, 351, 352 |
| Lepers segregation of, in West Indies, .....   | 70                     |
| Letter to school boards, .....   | 794                    |
| Lewisburg report, .....  | 525, 635               |
| Lewistown, report for, .....   | 632                    |
| Lewisville report, .....   | 632                    |
| Liability for sewerage injury, .....   | 809                    |
| Liberty, report for, .....   | 632                    |
| Library additions to, .....  | 989                    |
| License, embalmers, .....  | 798                    |
| Licenses issued by examining board to persons with certificates from other states, ..... | 1125                   |
| Ligonier, report for, .....  | 633                    |
| Limeridge, inspection at, .....  | 316                    |
| Linesville, report for, .....  | 633                    |
| List of boards, .....  | 777                    |
| List of medical colleges, .....  | 1141                   |
| List of persons examined by State Medical Council, .....                                 | 1117                   |
| Lititz, report for, .....  | 633                    |
| Local boards to report, .....  | 837                    |
| regulations for, .....   | 883                    |
| Lock Haven, report for, .....  | 633                    |
| Logan, S. C., inspection at Stokesdale Tannery, .....                                    | 242                    |
| report of, .....   | 181                    |
| Loganton, report for, .....  | 633                    |
| Luzerne county, report for, .....  | 174                    |
| Lycoming county, report for, .....   | 175                    |
| Mahaffey, report for, .....  | 633                    |
| Mahanoy City, report for, .....  | 533, 634               |
| Maison, R. S., inspection at Darby, .....  | 193                    |
| inspection at Fernwood, .....  | 199                    |
| inspection at South Media, .....   | 201                    |
| inspection at Chester, .....   | 205                    |
| inspection at Nether Providence, .....   | 206                    |
| inspection at Sharon Hill, .....   | 206                    |
| inspection at Darby, .....   | 210                    |
| inspection at Lansdowne, .....   | 220                    |
| Mandamus, act on, .....  | 952                    |
| Manheim, report for, .....   | 635                    |

|   | Page.         |
|---|---------------|
| Manor, report for, .....  | 635           |
| Mansfield, inspection at, .....   | 230           |
| Marcus Hook inspection, .....   | 90, 222       |
| report for, .....   | 635           |
| Markets, .....  | 520           |
| Marriages, .....  | 525, 532, 542 |
| Matson, E. G., report by, .....   | 319           |
| Matthews, W. E., inspections in Cambria county, .....                             | 312           |
| inspection at Conemaugh, .....  | 285           |
| report of, .....  | 159           |
| Mauch Chunk, inspection at, .....   | 248           |
| Mayfield, report for, .....   | 635           |
| McCalmont township, inspection at, .....  | 316           |
| McCormick, H. C., opinion as to power of State Board to suppress epidemic, .....  | 805           |
| McKeesport, report for, .....   | 527, 636      |
| McSherrytown, report for, .....   | 641           |
| Meadville, report for, .....  | 535, 641      |
| Measles, .....  | 703           |
| Media, report for, .....  | 537, 645      |
| Medical colleges and diploma of public health, .....                              | 984           |
| colleges, list of, .....  | 1141          |
| Council Report, .....   | 1107          |
| inspectors of State, .....  | 832           |
| inspectors, resignations of, .....  | 77            |
| Mechanicsburg, report for, .....  | 645           |
| Meetings of the Board, .....  | 3             |
| Meteorological observations of the Weather Bureau, .....                          | 1157          |
| report, .....   | 624           |
| Mifflinburg, report for, .....  | 648           |
| Milesburg, report for, .....  | 648           |
| Milk inspection, ..... 518, 519, 533, 535, 544, 563, 618, 625, 642, 667, 698, 727 | 727           |
| must not be adulterated, .....  | 855           |
| Millersburg, report for, .....  | 648           |
| Millerstown, report for, .....  | 648           |
| Millvale, report for, .....   | 648           |
| Mimeographed letters, .....   | 37            |
| Minersville, report for, .....  | 648           |
| Minutes of board, .....   | 45            |
| Model forms for reports, .....  | 939           |
| forms for permits, .....  | 938           |
| regulations for boards of health, .....   | 883           |
| regulations for school boards of health, .....                                    | 933           |
| rules for boards of health, .....   | 894           |
| Modern methods for production of vaccine virus, .....                             | 459           |
| Monaca, report for, .....   | 649           |
| Monroe county, report for, .....  | 176           |
| Monroeton, inspection at, .....   | 229           |
| Montgomery county, report for, .....  | 176, 649      |
| Montgomery, P. B., inspection, .....  | 224           |
| inspection at Chambersburg, .....   | 227           |
| inspection at Ashtola, .....  | 286           |
| Mount Alton, inspection at, .....   | 238           |
| Mount Carbon, report for, .....   | 649           |

|   | Page.              |
|---|--------------------|
| Mount Carmel, report for, .....                         | 649                |
| Mount Hope, inspection at, .....                        | 198                |
| Morrow, J. W., inspection at Kellettville, .....        | 195                |
| report of, .....  | 167                |
| Mountain water supplies, .....                          | 396                |
| Mumps, .....  | 526                |
| Nanticoke, inspection at, .....                         | 243                |
| Narberth, report for, .....                             | 649                |
| Nazareth, inspection at, .....                          | 200                |
| report for, .....                                       | 649                |
| Need of increase in appropriation to State Board, ..... | 18                 |
| Need of school boards of health, .....                  | 621                |
| Nescopeck, report for, .....                            | 649                |
| Nether Providence, inspection at, .....                 | 206                |
| Neville Island Board, .....                             | 81                 |
| New boards, .....                                       | 135                |
| New Brighton, report for, .....                         | 650                |
| New Castle, report for, .....                           | 653                |
| New Cumberland, report for, .....                       | 653                |
| New Florence, inspection at, .....                      | 327                |
| New Haven, report for, .....                            | 654                |
| Newton, inspection at, .....                            | 237                |
| Newtown, report for, .....                              | 654                |
| Newville, report for, .....                             | 654                |
| New Wilmington, report for, .....                       | 654                |
| Night soil depositing, .....                            | 206, 863           |
| dumping in public waters, .....                         | 863                |
| nuisance, .....   | 93, 230, 625       |
| Norristown Board proclamation, .....                    | 69                 |
| Insane Asylum, inspection at, .....                     | 221                |
| report for, .....                                       | 654                |
| North East, report for, .....                           | 658                |
| Northampton county, report for, .....                   | 178                |
| Northumberland, report for, .....                       | 540, 658           |
| North Wales, report for, .....                          | 660                |
| North Woods School, inspection at, .....                | 246                |
| Norwood, report for, .....                              | 660                |
| Noxious trades, .....                                   | 844                |
| Nuisances, .....  | 520, 534, 570, 732 |
| abatement, etc., of, .....                              | 843                |
| defined, .....  | 843                |
| Oakland, report for, .....                              | 660                |
| Oakmont, inspection at, .....                           | 231                |
| report for, .....                                       | 660                |
| Offal nuisance, .....                                   | 205                |
| Officers of State Board, .....                          | 831                |
| Oil City, report for, .....                             | 558, 661           |
| Olivedale, inspection at, .....                         | 240                |
| Oleomargarine law on, .....                             | 980                |
| Olyphant, report for, .....                             | 663                |
| Opinions as to expense incruising out small-pox, .....  | 55                 |
| Organization, etc., of State Board, .....               | 4, 831             |
| Organization of school boards as health boards, .....   | 826                |

|  | Page.                                      |
|--|--|
| Orlady, Judge, on sustaining State Board in protecting water supply, . . . . | 799  |
| Orwigsburg, report for, . . . . .  | 663  |
| Oxford, report for, . . . . .  | 663  |
| Paradise Vallet, inspection at, . . . . .                                    | 253  |
| Paris Exposition, . . . . .  | 19   |
| Parkesburg report, . . . . .   | 663  |
| Passengers admitted at Port of Philadelphia, . . . . .                       | 263  |
| Patton, report, . . . . .  | 663  |
| Pearson, L., report on anthrax, . . . . .                                    | 354  |
| Pennsylvania Forestry Association, paper read by Dr. Lee, . . . . .          | 408  |
| Penn township, inspection at, . . . . .                                      | 223  |
| Period of isolation, . . . . .   | 855  |
| Perkasie, report, . . . . .  | 664  |
| Personal hygiene for the school teacher, . . . . .                           | 471  |
| Persons examined by the Medical Examiners, . . . . .                         | 1117                                       |
| Petersburg, report, . . . . .  | 664  |
| Pharmaceutical Examining Board, report, . . . . .                            | 993  |
| Pharmacists registered, . . . . .  | 1001                                       |
| Philadelphia, report of, . . . . .   | 664  |
| Philadelphia water supply, . . . . .   | 16   |
| Phillips, F. C., report of, . . . . .  | 187  |
| Phillipsburg, report of, . . . . .   | 693  |
| Phoenixville, report, . . . . .  | 541, 693                                   |
| Piggeries, . . . . .   | 92, 95, 210, 352                           |
| control of, . . . . .  | 862  |
| Pike county, report for, . . . . .   | 178  |
| Pine Grove, report of, . . . . .   | 700  |
| Pitfield, R. L., inspection at State Normal School, Kutztown, . . . . .      | 192  |
| inspection at Nazareth, . . . . .  | 200  |
| inspection at Mansfield, . . . . .   | 230  |
| inspection at Scranton, . . . . .  | 244  |
| inspection at Mauch Chunk, . . . . .   | 248  |
| Pittsburgh, inspection near, . . . . .                                       | 309  |
| report of, . . . . .   | 700  |
| Pittston, report of, . . . . .   | 728  |
| Placarding houses in disease, . . . . .                                      | 820, 857                                   |
| Plague precautions, . . . . .  | 915  |
| Plans for disinfection of troops, . . . . .                                  | 817  |
| Plan for sewage disposal, . . . . .  | 823  |
| Plum, H. A., inspection at, . . . . .  | 249  |
| report of, . . . . .   | 183  |
| Plumbing, . . . . .  | 641, 655                                   |
| Plymouth, report of, . . . . .   | 728  |
| Pneumonia, . . . . .   | 705  |
| Pocono as health resort, . . . . .   | 52   |
| district climatic value, . . . . .   | 829  |
| laboratory inspection, . . . . .   | 86   |
| Point Marion, report of, . . . . .   | 728  |
| Pollution of water from chemical works, . . . . .                            | 237  |
| streams, etc., . . . . .   | 29, 119, 120, 121, 122, 123, 192, 124, 126 |
| Schuylkill forbidden, . . . . .  | 863  |
| streams to prevent, . . . . .  | 862  |
| Polluted well, . . . . .   | 125  |

## Page.

|  |          |
|--|----------|
| Polk, report of, .....   | 728      |
| Port Allegheny, report of, .....   | 729      |
| Port Carbon, report, .....   | 729      |
| Portland, report, .....  | 729      |
| Potter county, report for, .....   | 177      |
| Pottstown, report, .....   | 729      |
| Power of State Board to suppress epidemic, .....                         | 805, 807 |
| Power of State Board, .....  | 836      |
| Precautionary circulars, .....   | 934      |
| Precautions to prevent spread of small-pox, .....                        | 330      |
| Preservation of health, public, .....                                    | 851      |
| President elected for unexpired term, .....                              | 71       |
| the year, .....  | 192      |
| Prevalence of communicable diseases, .....                               | 53       |
| Preventable diseases, report on, .....                                   | 149      |
| Printed forms, etc., .....   | 36       |
| Privies, .....   | 852      |
| Progress of small-pox, .....   | 330      |
| Property destruction, resolution on, .....                               | 103      |
| Property of Quarantine Board, .....                                      | 259      |
| Protection of water supply by State Board, .....                         | 799      |
| Protectory, at Fatland, sewage disposal at, .....                        | 823      |
| Public funeral, .....  | 533      |
| health diploma, .....  | 984      |
| health preservation, .....   | 851      |
| institutions, report on, .....   | 153      |
| Pumping systems for water of Philadelphia, .....                         | 363      |
| Quakertown, report, .....  | 729      |
| Qualified assistants, .....  | 1088     |
| Quarantine, .....  | 255      |
| as to baggage, etc., from Cuba, etc., .....                              | 135      |
| Board, Annual Report of, .....   | 255      |
| and expense, .....   | 808      |
| Questions used by Medical Examining Board, .....                         | 1127     |
| used by examiners in preliminary examination, .....                      | 1147     |
| Rankin, report for, .....  | 730      |
| Raub, M. W., report of, .....  | 169      |
| Reading, report, .....   | 546, 730 |
| Reber, W. M., drainage into creek, .....                                 | 825      |
| Red Lion, report, .....  | 749      |
| Reeder, W. F., advice as to obtaining money to suppress epidemics, ..... | 806      |
| Registration of deaths, .....  | 822      |
| of vital statistics, need of, .....                                      | 424      |
| report on, .....   | 152      |
| Regulations of quarantine, .....   | 264      |
| to prevent Schuylkill pollution, .....                                   | 89       |
| of State Board, .....  | 843      |
| Renovated butter law on, .....   | 978      |
| Renovo, report, .....  | 749      |
| Request for exhibit at Paris, .....                                      | 69       |
| Resolutions on using emergency fund, .....                               | 48       |
| Reynoldsville, report, .....   | 749      |
| Rice, G. L., report of, .....  | 156      |

|   | Page.    |
|---|----------|
| Richter, A., inspection at Laporte, .....   | 225      |
| Laporte, .....  | 226      |
| Forksville, .....   | 234      |
| Dickinson Seminary, .....   | 251      |
| report of, .....  | 175      |
| Riderville, inspection at, .....  | 201      |
| Ridley Park, report, .....  | 749      |
| Ridgway, report, .....  | 749      |
| Right of boards to license embalmers, .....   | 798      |
| Rights of Quarantine Board to condemn property, .....   | 259, 260 |
| Rinehart, S. M., inspection at Penn township, .....   | 223      |
| inspection at Oakmont, .....  | 231      |
| inspections in Allegheny county, .....  | 297      |
| report of, .....  | 156      |
| Roaring Springs, report, .....  | 749      |
| Robertson, W. M., inspection at Sheffield, .....  | 194      |
| report of, .....  | 182      |
| Rochester, report, .....  | 750      |
| Rock Hill Furnace, report, .....  | 750      |
| Rockledge, report, .....  | 750      |
| Rome, report, .....   | 750      |
| Routine work of office, .....   | 100, 136 |
| Royersford, report, .....   | 750      |
| Rutledge, report, .....   | 751      |
| Sandy Run, inspection at, .....   | 276      |
| Sanitary legislation of 1899-5, .....   | 414      |
| Sanitary legislation report, .....  | 150      |
| Sanitary supervision of travel and traffic, .....   | 846      |
| Sanitary work, hints for, .....   | 480      |
| Sanitation and forestry, .....  | 408      |
| Scalp Level, report, .....  | 751      |
| Scarlet fever outbreaks, ..... 25, 57, 91, 113, 118, 119, 203, 227, 224, 249, 528, 636,<br>703, 665 |          |
| Sewickley, report, .....  | 752      |
| Sextons, rules for, .....   | 855      |
| Shade trees, .....  | 564      |
| Shank, O. J., inspection at Windber, .....  | 277      |
| Sharon, report, .....   | 752      |
| inspection at, .....  | 206      |
| Hill, report, .....   | 752      |
| Sharpsburg, report, .....   | 753      |
| Sharpsville, report, .....  | 753      |
| Sheffield, inspection at, .....   | 194      |
| Shenandoah, report, .....   | 753      |
| Sheridan, report, .....   | 756      |
| Shippensville, report, .....  | 757      |
| Shoemaker, J. G., inspection at Spring City, .....  | 219      |
| Shoemaker, R. F., inspections in Fulton county, .....   | 294      |
| Sickroom disinfection, .....  | 858      |
| Sinnemahoning, inspection at, .....   | 235      |
| Slatington, report, .....   | 757      |
| Slaughter houses, ..... 119, 121, 228, 250, 219   |          |
| Slee, R., inspection at Paradise Valley, .....  | 253      |



|   | Page.              |
|---|--------------------|
| modern methods in production of vaccine virus, .....  | 459                |
| paper discussion on, .....  | 427                |
| Scholars and typhoid fever, .....   | 828                |
| School boards as health boards, .....   | 9, 135, 791, 826   |
| School health boards, model regulation for, .....   | 104                |
| health boards, need of, .....   | 173                |
| inspections, .....  | 667                |
| room condemned, .....   | 197                |
| teacher, personal hygiene for, .....  | 471                |
| Schuylkill river as water supply, .....   | 358, 679           |
| inspection of, .....  | 88                 |
| regulation to prevent pollution, .....  | 104, 863           |
| Scottdale, report, .....  | 751                |
| Scranton, report, .....   | 551, 751           |
| inspection at, .....  | 244                |
| Selinsgrove, report, .....  | 752                |
| Sewage, .....   | 251, 545, 562, 758 |
| disposal plant at Fatland, .....  | 18, 135, 753, 823  |
| deposit at State Asylum, Norristown, .....  | 17, 93, 207        |
| nuisance, .....   | 220                |
| Sewerage, injury liability, .....   | 809                |
| at Marcus Hook, .....   | 222                |
| at West Pittston, .....   | 128                |
| Sewers, .....   | 619, 352           |
| Sewage purification at Norristown, .....  | 87                 |
| Small-pox, .. 54, 110, 114, 115, 116, 117, 119, 120, 122, 123, 124, 125, 126, 127, et seq.,<br>164, 168, 181, 184, 528, 580, 664, 672, 694, 703 |                    |
| cases and deaths in the State, .....  | 22                 |
| circular, .....   | 866                |
| concealment of, .....   | 81, 85             |
| diagnosis of, .....   | 339, 866           |
| epidemic of 1898-1899, .....  | 19                 |
| emergency, .....  | 107                |
| and State Board, .....  | 807                |
| in Pennsylvania, .....  | 80, 91, 265        |
| in Bedford county, etc., .....  | 46                 |
| inspectors pay, rate of, .....  | 141                |
| inspections for, .....  | 63, 97             |
| at Neville Island, .....  | 95                 |
| law against, .....  | 875                |
| precautions against, .....  | 868                |
| prevention, .....   | 868                |
| resolutions on, .....   | 52                 |
| illustrations (et seq.), .....  | 270, 340           |
| Snyder county, report for, .....  | 180                |
| Coiled clothing destroyed, .....  | 254                |
| Soldiers sick, preparation for, .....   | 258                |
| Tweedle, J. B., inspection at Lansford, .....   | 197                |
| report of, .....  | 160, 161           |

|  | Page.    |
|--|----------|
| Typhoid fever, .... 26, 58, 92, 113, 114, 121, 127, 175, 186, 199, 231, 253, 526, 528, 558, 601, 636, 655, 665, 669, 699, 703, 730, 750, 773 |          |
| and exclusion from school, .....   | 828      |
| and sewers, .....  | 809      |
| in Philadelphia, .....   | 16       |
| Typhus fever suspected on Steamer Aragonia, .....  | 352      |
| Tyrone, report, .....  | 763      |
| Unwholesome food not to be sold, .....   | 855      |
| Under one year, deaths, .....  | 538      |
| Upland, report, .....  | 763      |
| Vaccinations, .....  | 668, 754 |
| Vaccination, demand for, .....   | 427      |
| discussion on, .....   | 428      |
| in Porto Rico, .....   | 4        |
| neglect of, .....  | 164      |
| of school children, .....  | 545      |
| required, .....  | 855      |
| Solutions, disinfecting, .....   | 859      |
| Somerset county, inspection in, .....  | 282      |
| South Bethlehem, report, .....   | 560, 757 |
| South Greensburg, report, .....  | 757      |
| Southwest Greensburg, report, .....  | 758      |
| South Media, inspection at, .....  | 201      |
| Mountain, inspection at, .....   | 202      |
| Renovo, report, .....  | 757      |
| Washington, report, .....  | 757      |
| Special sources of disease, .....  | 349      |
| subjects, .....  | 45       |
| Spread of small-pox, .....   | 20       |
| Spring City, inspection at, .....  | 219      |
| report, .....  | 758      |
| Standing committees reports, .....   | 147      |
| State Asylum at Norristown, inspection, .....  | 207      |
| Board and epidemic, .....  | 805      |
| Board and water supply, .....  | 799      |
| Statement of cases of small-pox from December, 1898, to November, 1899,...   |          |
| Statistics relating to the medical students, .....   | 1112     |
| Steelton, report, .....  | 760      |
| Still-born burial permits, .....   | 808      |
| Telford, report, .....   | 761      |
| Throop, report, .....  | 761      |
| Tidioute, report, .....  | 761      |
| Tioga county, report for, .....  | 181      |
| report, .....  | 762      |
| Tionesta, report, .....  | 761      |
| Titusville, report, .....  | 762      |
| Thompson, R. L., inspections at Bower Hill and Borland, .....  | 306      |
| Topton, report, .....  | 762      |
| Towanda, report, .....   | 763      |
| Town, C. E., report for Pennsylvania Railroad, .....   | 254      |
| Townsend, T. F., meteorological observations, .....  | 1157     |
| Transportation of bodies, .....  | 847      |
| Travel and traffic, report on, .....   | 149      |

|   | Page.         |
|---|---------------|
| Tremont, report, .....  | 762           |
| Troops, disinfection of, .....  | 817           |
| Troy, report, .....   | 763           |
| Tuberculosis, .....   | 704, 725      |
| Tullytown, report, .....  | 763           |
| Turnbull, T., examination of water supply at State Normal School, Indiana,                | 191           |
| sanitary legislation, .....   | 414           |
| Turtle Creek, report, .....   | 763           |
| St. Clair, report, .....  | 759           |
| St. Clairsville, inspection in, .....   | 275           |
| St. Thomas, inspection at, .....  | 224           |
| Stokesdale Tannery, inspection at, .....  | 242           |
| Stoneboro, report, .....  | 760           |
| Stonerstown, inspection at, .....   | 276           |
| Strasburg, report, .....  | 760           |
| Streams, pollution of, to prevent, .....  | 862           |
| Street cleaning, .....  | 565, 624      |
| Stroudsburg, report, .....  | 760           |
| Sulphur fumigation, .....   | 860           |
| Summit Hill, report, .....  | 760           |
| Susquehanna, report, .....  | 760           |
| Swarthmore, report, .....   | 761           |
| Tamaqua, report, .....  | 761           |
| Tannery drainage, .....   | 118           |
| Tannery pool of water, .....  | 229, 242, 862 |
| Tanning nuisance, .....   | 225           |
| Tarentum, report, .....   | 761           |
| Taylor, J. Howard, inspections at Windber, Johnstown, Altoona, .....                      | 282           |
| Taylor, R. L., inspection at Layton, .....  | 292           |
| Taylor, report for, .....   | 761           |
| Vaccination resolutions on, in American Medical Association, .....                        | 10            |
| Vaccine laboratory, .....   | 13            |
| virus, modern methods for, .....  | 459           |
| Verona, report, .....   | 764           |
| Vessels examined, .....   | 263           |
| Vital statistics, .. 29, 529, 530, 536, 540, 550, 551, 560, 562, 566, 571, 573, 581, 586, |               |
| 591, 595, 600, 601, 614, 619, 626, 630, 634, 636, 637, 643, 646, 661,                     |               |
| 652, 655, 658, 673, 694, 700, 707, 734, 753, 755, 758, 765, 768, 774                      |               |
| registration of, .....  | 14            |
| Wagenseller, F. J., inspection at Beavertown, .....                                       | 216           |
| report of, .....  | 180           |
| Warren county, report for, .....  | 182           |
| Washington, .....   | 764           |
| county, inspection in, .....  | 310           |
| Street Wharf, inspection at, .....  | 311           |
| Water analysis, .....   | 38            |
| consumption of Philadelphia, .....  | 364           |
| conveyed in lead pipes, .....   | 828           |
| filtration, .....   | 376           |
| pollution, legislation for, .....   | 6             |
| pollution by tannery, .....   | 242           |
| purification, .....   | 698           |

**Water Analysis—**

|  |          |
|--|----------|
| supplies polluted, . . . 170, 181, 185, 218, 226, 230, 234, 244, 248, 545, 578, 618, 623, 630, 679, 751, 753, 759, 799 |          |
| supplies, pollution, opinion on, .....   | 15       |
| supplies, examination, .....   | 191      |
| supply, law to protect, .....  | 975      |
| supply of Philadelphia, report on extension of, .....  | 356      |
| Watson, R. B., inspection at Booneville, .....   | 196      |
| report of, .....   | 162      |
| Watson, report, .....  | 766      |
| Wayne county, report for, .....  | 183      |
| Waynesburg, report, .....  | 562, 766 |
| Waynesboro, report, .....  | 766      |
| Weatherly, report, .....   | 767      |
| Webster, inspection at, .....  | 228      |
| Weissport, report, .....   | 769      |
| Welch, W. M., inspection near Pittsburg, .....   | 309      |
| inspection at New Florence, .....  | 327      |
| remarks on the present mild type of small-pox, the symptoms and diagnosis, .....                                       | 339      |
| Well infected, .....   | 218, 246 |
| Wellsboro, report, .....   | 769      |
| Wesleyville Cemetery, inspector for, .....   | 105      |
| inspection at, .....   | 204      |
| West Bridgewater, report, .....  | 769      |
| West Bethlehem, report, .....  | 769      |
| West Chester, report, .....  | 769      |
| West Conshohocken, .....   | 770      |
| West Hazleton, report, .....   | 770      |
| Westline, inspection at, .....   | 240      |
| Westmont, report, .....  | 770      |
| Westmoreland county, inspections in, .....   | 318      |
| Westmoreland county, report for, .....   | 183      |
| West Newton, report, .....   | 770      |
| West Pittston, report, .....   | 770      |
| inspection at, .....   | 251      |
| suspected yellow fever at, .....   | 349      |
| Whitcomb, H. H., inspection at Willow Grove, .....   | 211      |
| inspection at Norristown Insane Asylum, .....  | 221      |
| organization, etc., of health boards, .....  | 453      |
| personal hygiene for the school teacher, .....   | 471      |
| report of, .....   | 176      |
| White, T. H., report of, .....   | 164      |
| Whooping cough, .....  | 526, 702 |
| Wilkinsburg, report, .....   | 771      |
| Williamsport, report, .....  | 563, 771 |
| Willow Grove, inspection at, .....   | 211, 233 |
| Wilmerding, report, .....  | 772      |
| Wilson, Judge, charge on liability of Philadelphia for injury by sewerage, .....                                       | 809      |
| Windber, inspection at, .....  | 277      |
| reports on small-pox at, .....   | 278      |
| Wood, C. B., inspection in Washington county, .....  | 310      |

|   | Page.            |
|---|------------------|
| Wood, S. M., inspection at Monroeton, .....     | 229              |
| inspection at North Woods School, .....         | 246              |
| Woman's Sanitary League of Philadelphia, .....  | 479              |
| Wright, J. W., inspection at Wesleyville, ..... | 204              |
| Wrightsville, report, .....                     | 772              |
| Yardley, report, .....                          | 772              |
| Yeadon, report, .....                           | 772              |
| Yellow fever, .....                             | 11, 771          |
| restriction, .....                              | 50               |
| suspected case, .....                           | 28, 96, 212, 349 |
| York, report, .....                             | 772              |
| York county, report for, .....                  | 185              |
| York Haven, report, .....                       | 775              |
| Yorkville, report, .....                        | 775              |
| Zulick, T. C., inspection at Easton, .....      | 216              |
| report of, .....                                | 178              |

